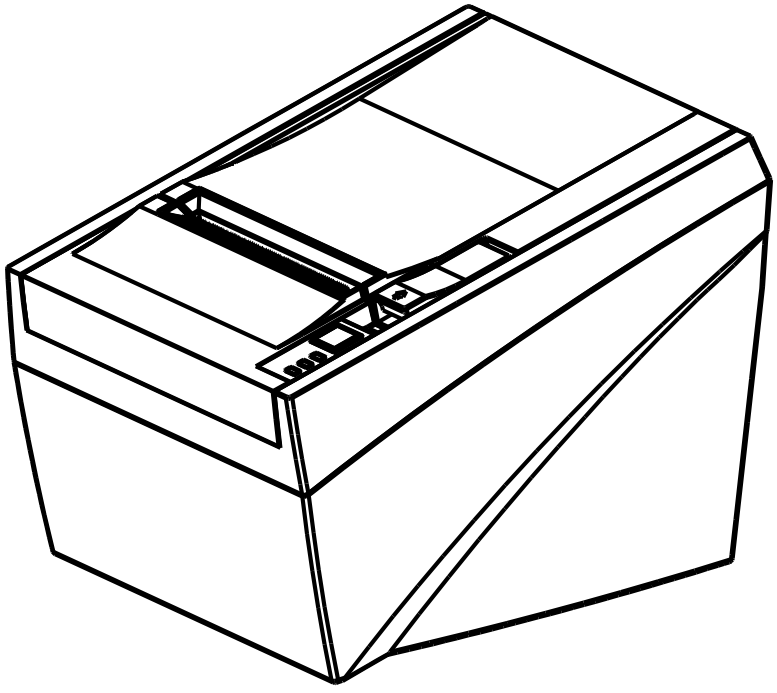
BIXOLON®

Windows Driver Manual

SRP-330

Thermal printer

Rev. 1.02



http://www.bixolon.com

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1. Manual Information

This Windows Driver Installation Manual provides information on installation, detailed specifications, and usage of the printer's Windows Driver according to PC operating system (OS).

We at BIXOLON maintain ongoing efforts to enhance and upgrade the functions and quality of all our products. In following, product specifications and/or user manual content may be changed without prior notice.

2. Operating System (OS) Environment

The following operating systems are supported by this Windows driver.

Microsoft Windows XP (32bit/64bit)
Microsoft Windows Server 2003 (32bit/64bit)
Microsoft Windows Vista (32bit/64bit)
Microsoft Windows Server 2008 (32bit/64bit)
Microsoft Windows Server 2008R2 (64bit)
Microsoft Windows 7 (32bit/64bit)
Microsoft Windows 8 (32bit/64bit)

3. Windows Driver Preparation

The Windows Driver is included in the enclosed CD, and Latest file versions can be downloaded from the Bixolon website. **(www.bixolon.com)**

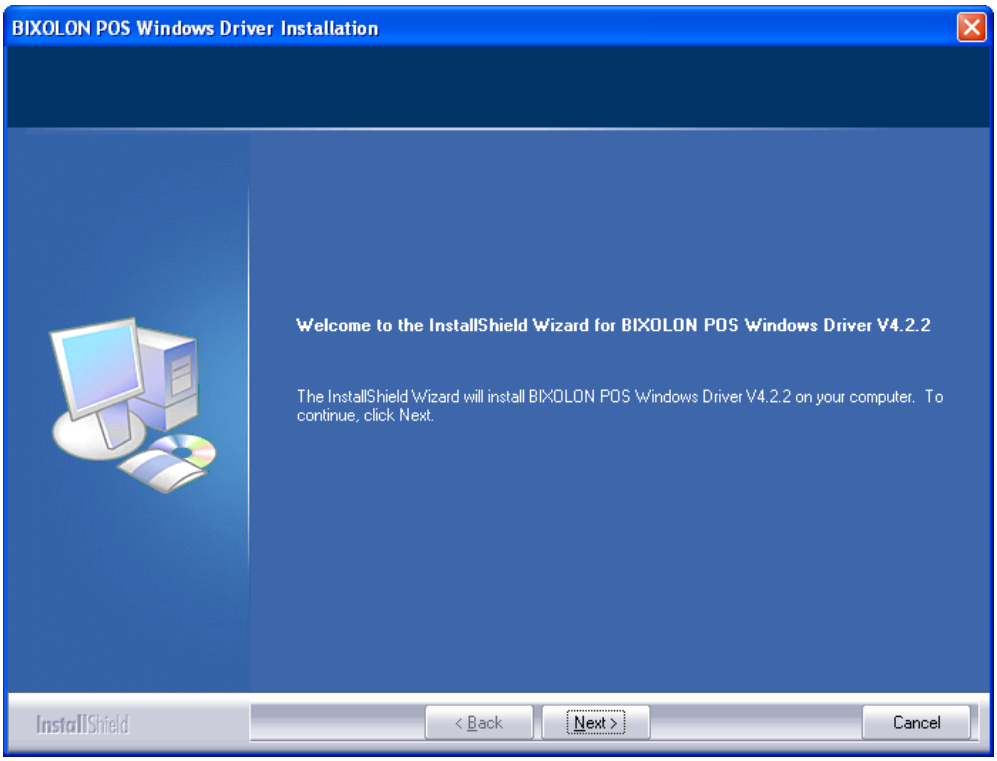
4. Windows Driver Installation

4-1 Installing on Windows XP / Server 2003

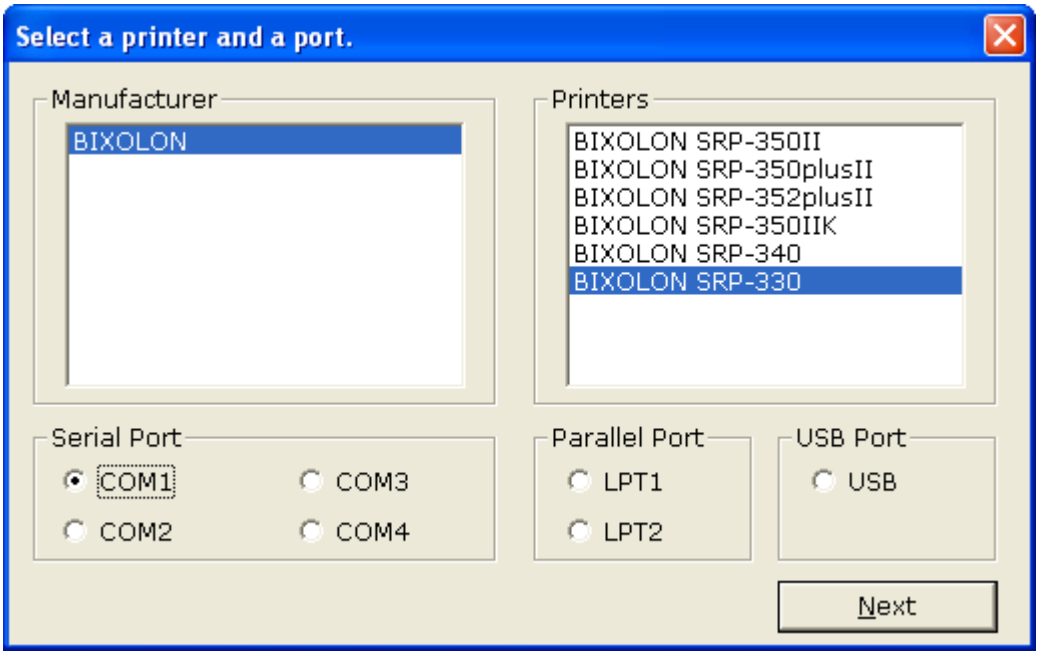
4-1-1 Via Serial Port or Parallel Port

1) Double-click the Windows Driver installation file.

2) Click the “Next” button.


BIXOLON POS Windows Driver Installation
Welcome to the InstallShield Wizard for BIXOLON POS Windows Driver V4.2.2
The InstallShield Wizard will install BIXOLON POS Windows Driver V4.2.2 on your computer. To continue, click Next.
InstallShield
< Back
Next >
Cancel

3) Select the printer model and a COM or LPT (Which one you want to use) port to be used, and then, click the “Next” button.



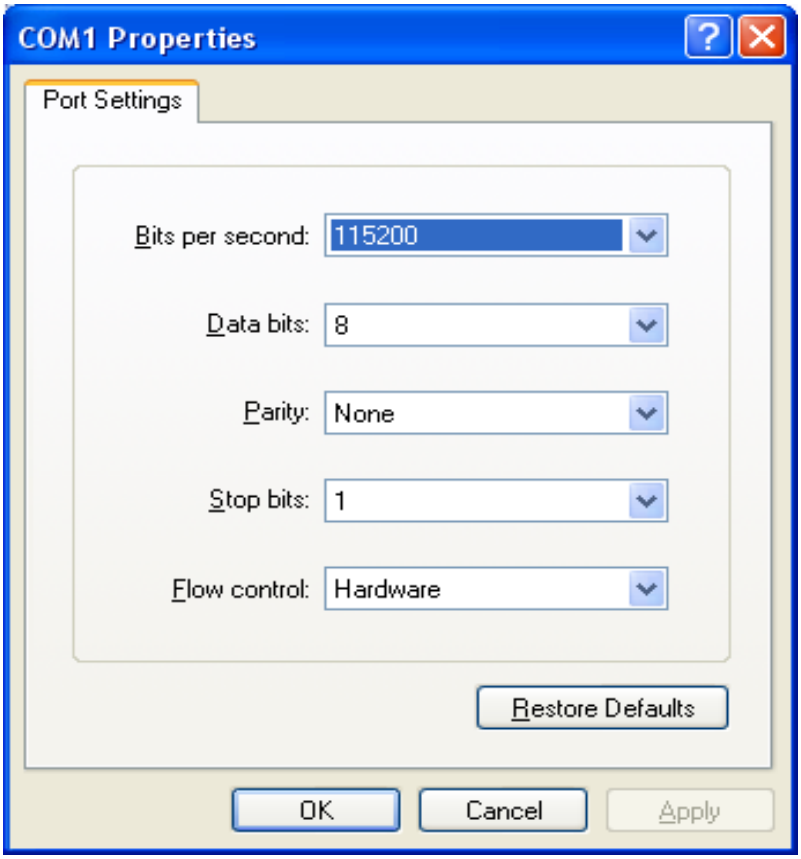
4) Clicking the “Yes” button will reboot the PC.

Restarting your computer can take effect.
Please restart your computer.
[Yes] I want to restart my computer now.
[No] I will restart my computer later.
Yes
No

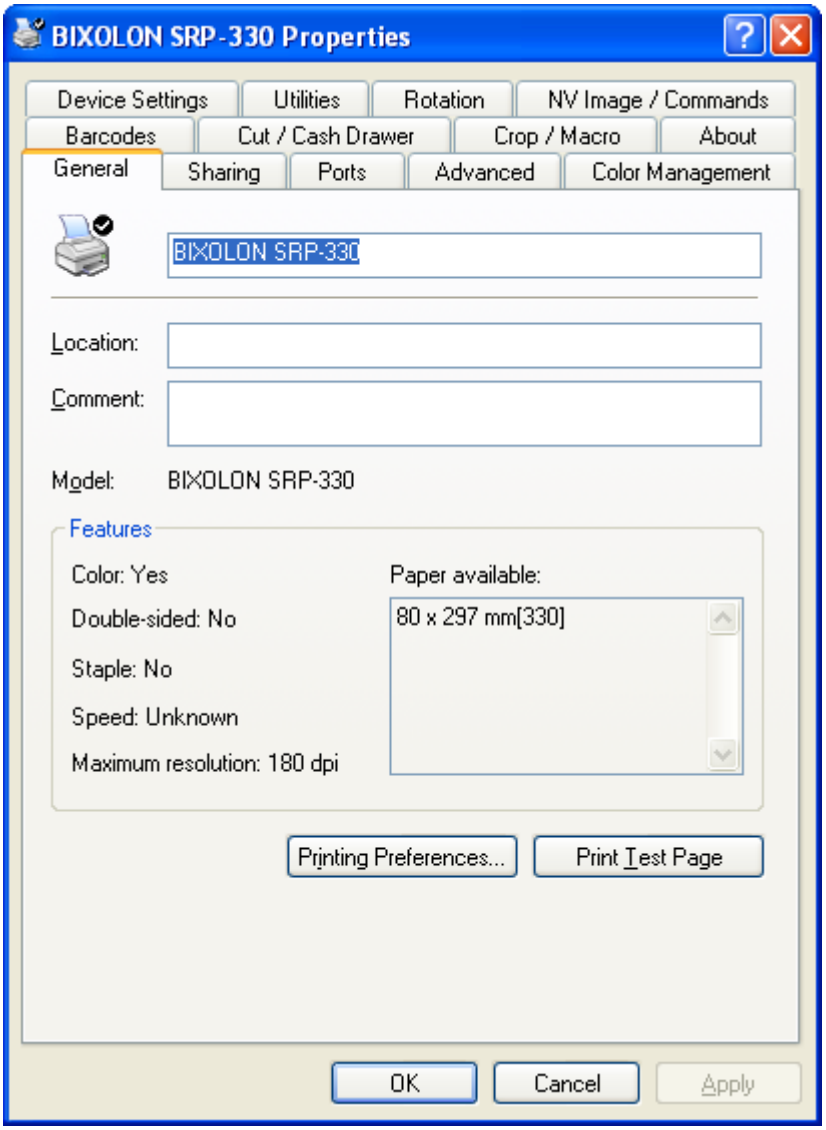
5) Open the printer properties window in the Windows OS.
※ Control Panel – Printers and Faxes.

6) If you select a serial port, click the “Configure Port…” button in the “Ports” tab.

7) If you select a serial port, match the communication settings to those of the printer.
(The communication settings of the printer can be performed by conducting a self-test.)



8) Click the “Print Test Page” button and check printing status.

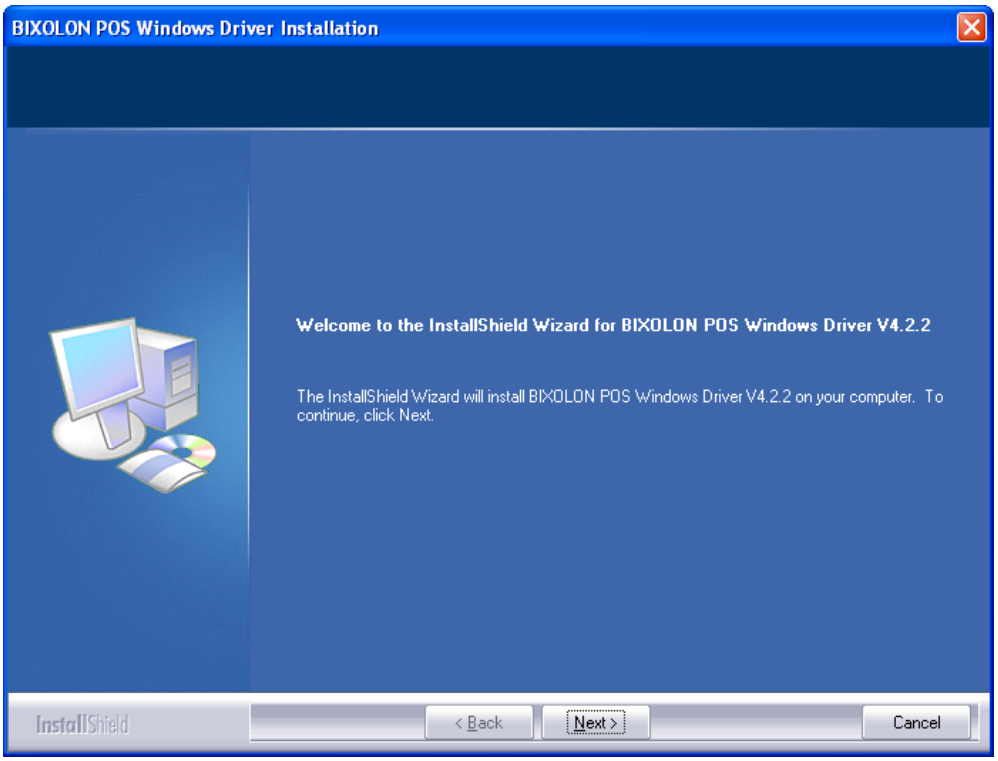


9) Proper installation of the driver is indicated if the test page is printed normally.

4-1-2 Via USB Port

1) Double-click the Windows Driver installation file.

2) Click the “Next” button.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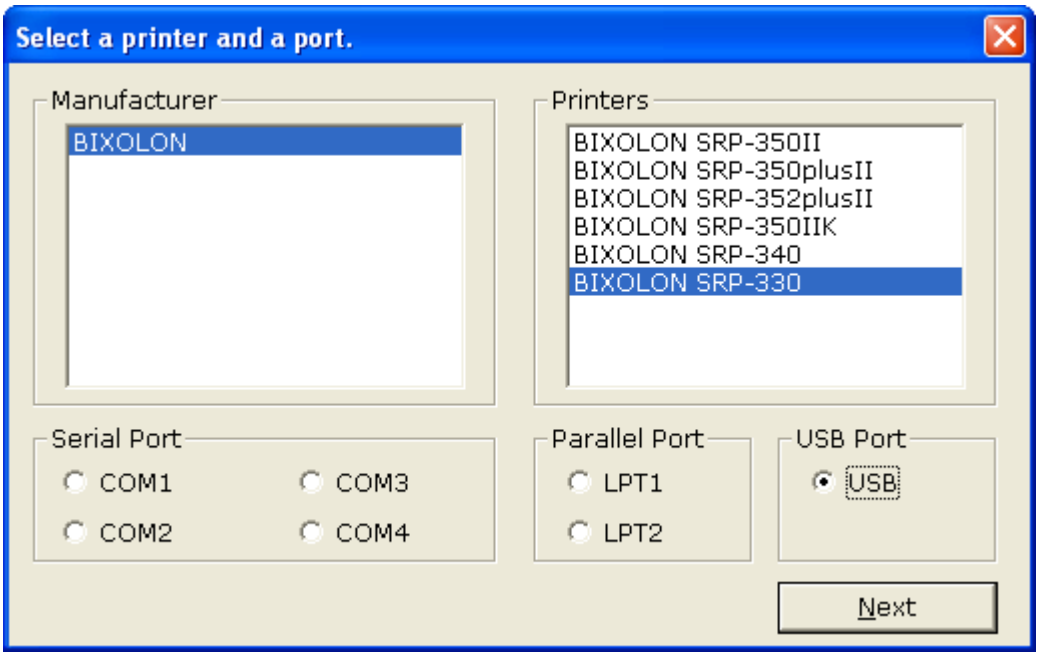
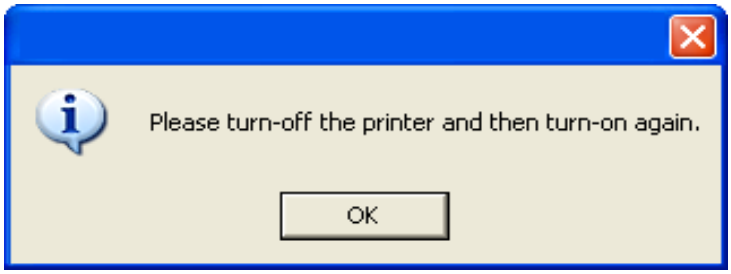
InstallShield
< Back
Next >
Cancel

3) Select the printer model and the USB port to be used, and then, click the “Next” button.



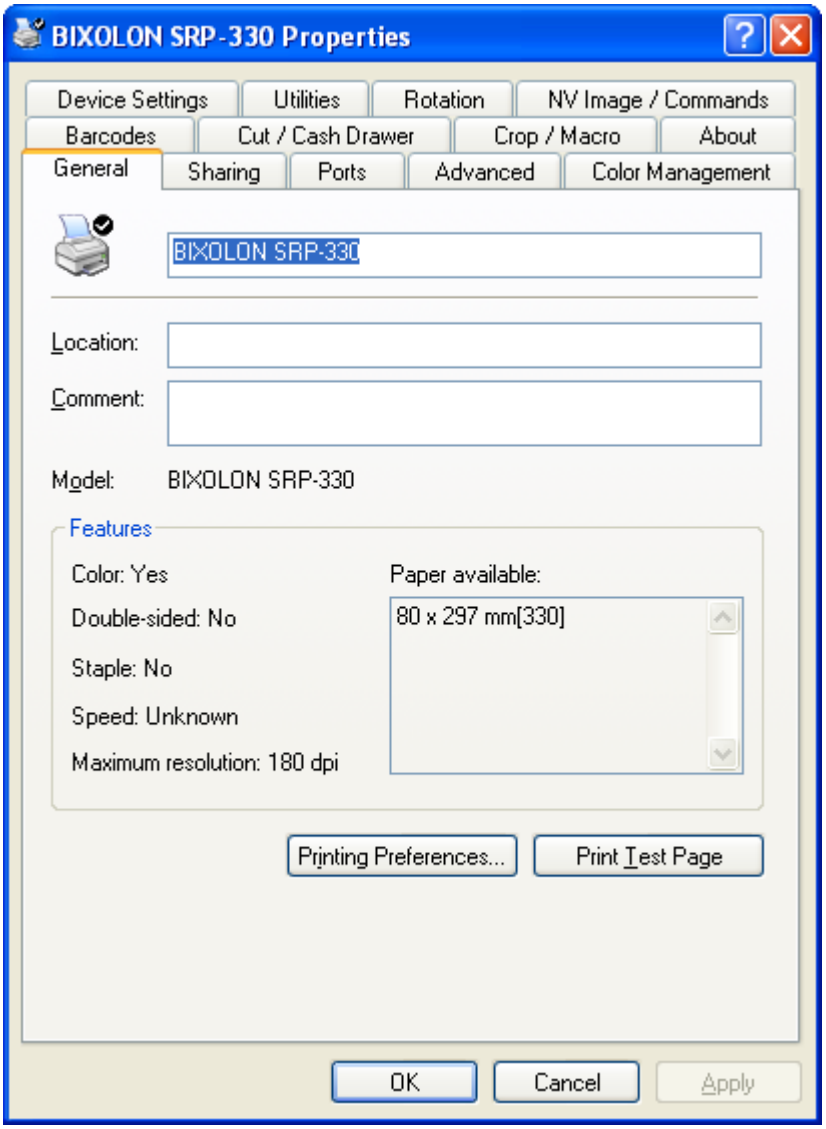
4) Click the “OK” button.



5) Turn off the printer and then turn on again. The printer driver will be installed automatically.

6) Open the printer properties window in the Windows OS.
※ Control Panel – Printers and Faxes.

7) Click the “Print Test Page” button and check printing status.



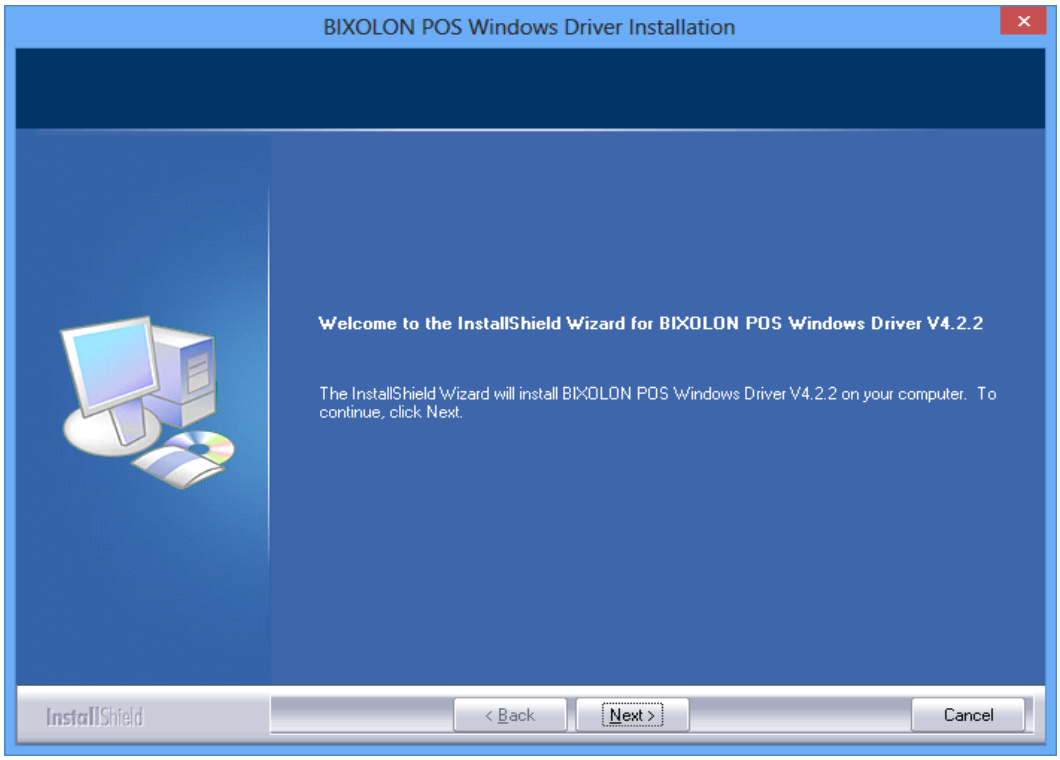
8) Proper installation of the driver is indicated if the test page is printed normally.

4-2 Installing on Windows VISTA / Server 2008 / 7 / 8

4-2-1 Via Serial Port or Parallel Port

1) Double-click the Windows Driver installation file.

2) Click the “Next” button.


BIXOLON POS Windows Driver Installation
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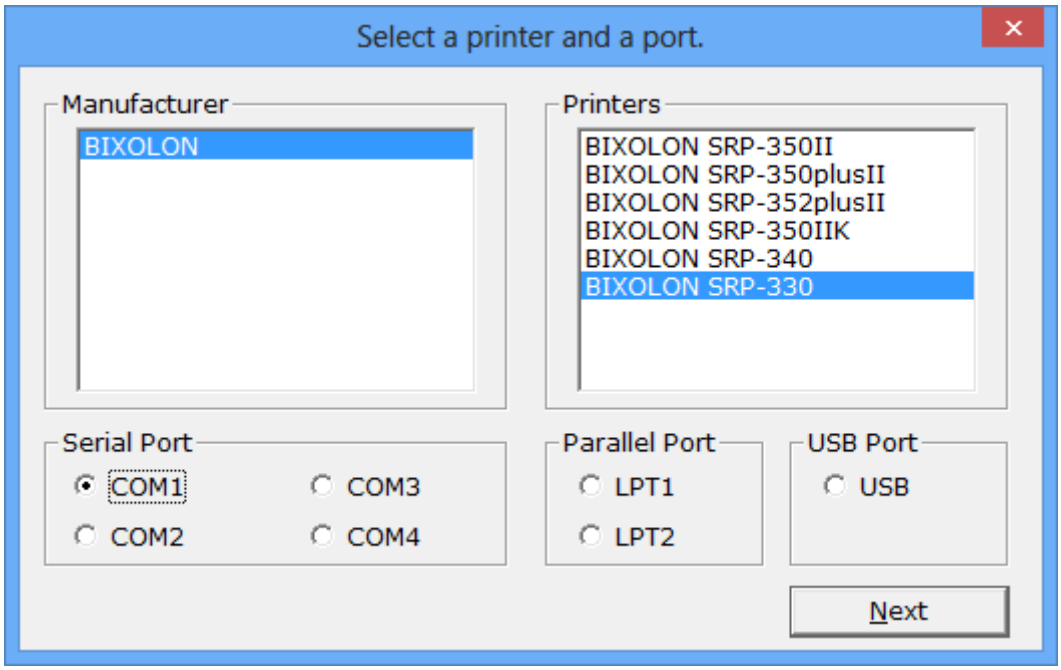
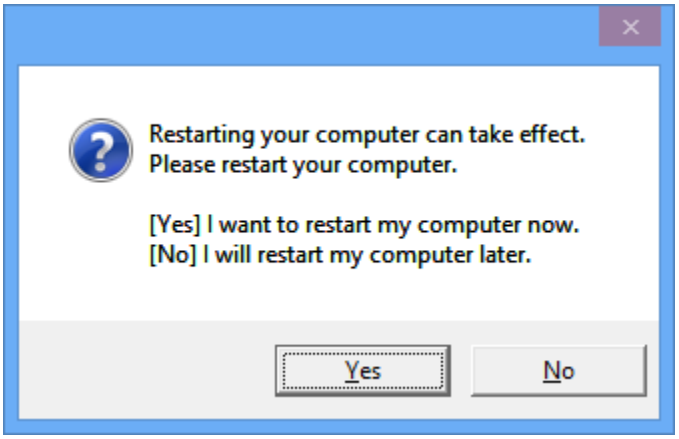
3) Select the printer model and a COM or LPT (Which one you want to use) port to be used, and then, click the “Next” button.



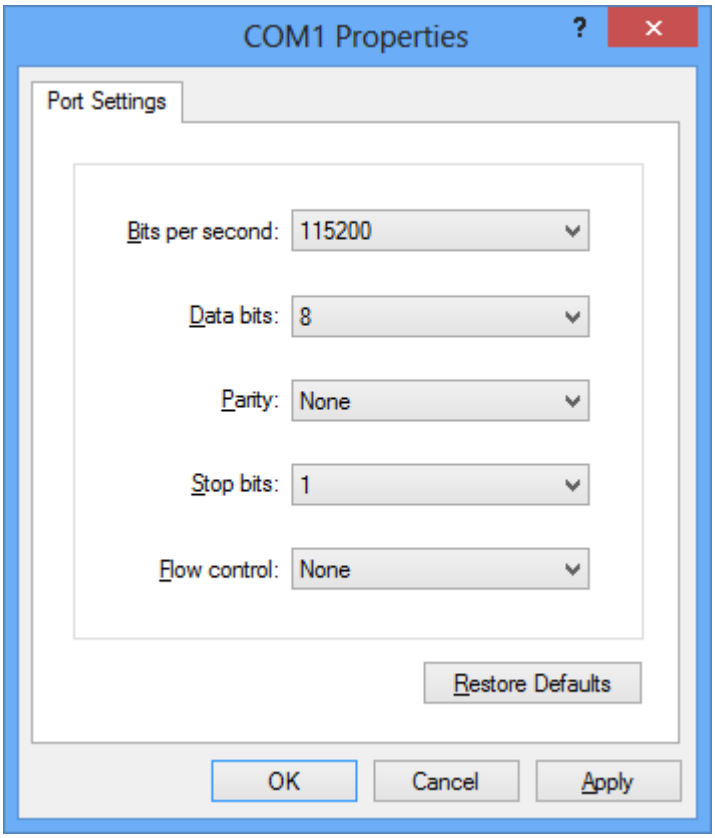
4) Clicking the “Yes” button will reboot the PC.


Restarting your computer can take effect.
Please restart your computer.
[Yes] I want to restart my computer now.
[No] I will restart my computer later.
Yes
No

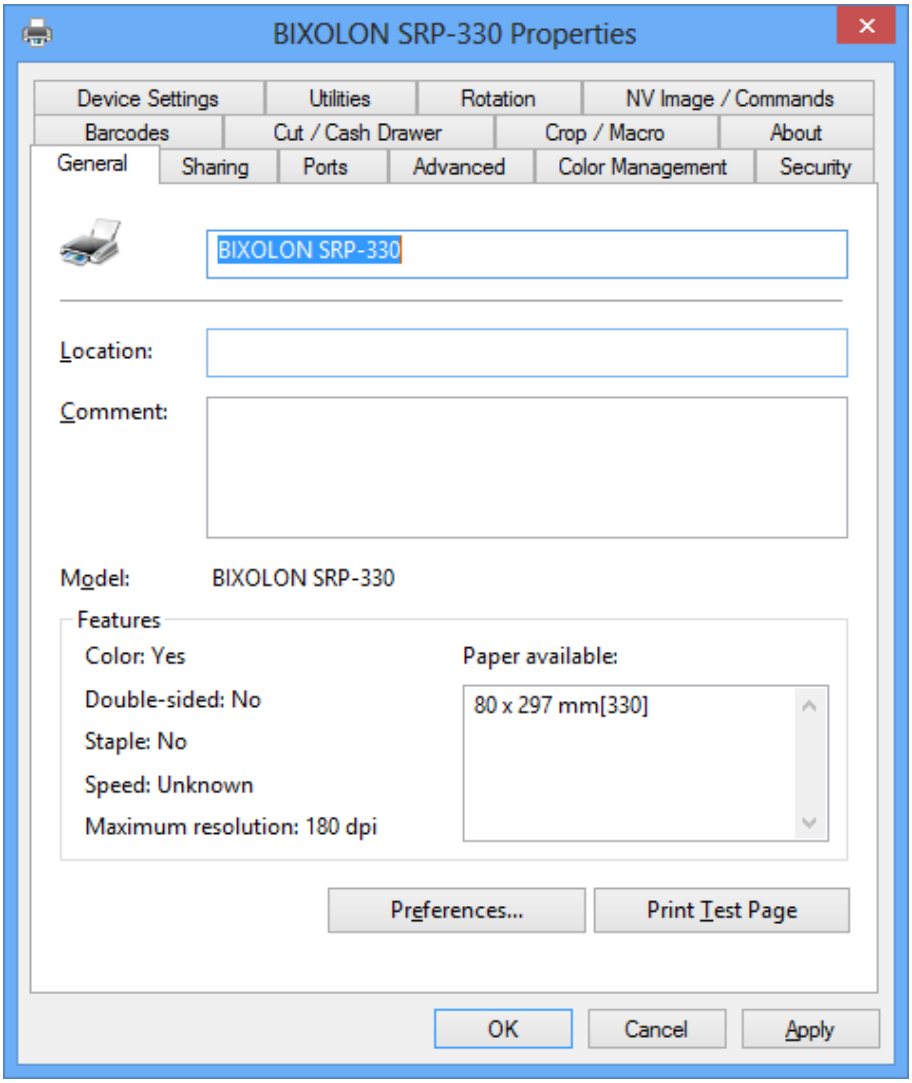
5) Open the printer properties window in the Windows OS.
※ Control Panel – Hardware and Sound – Device and Printers.

6) If you select a serial port, click the “Configure Port…” button in the “Ports” tab.

7) If you select a serial port, match the communication settings to those of the printer.
(The communication settings of the printer can be performed by conducting a self-test.)



8) Click the “Print Test Page” button and check printing status.

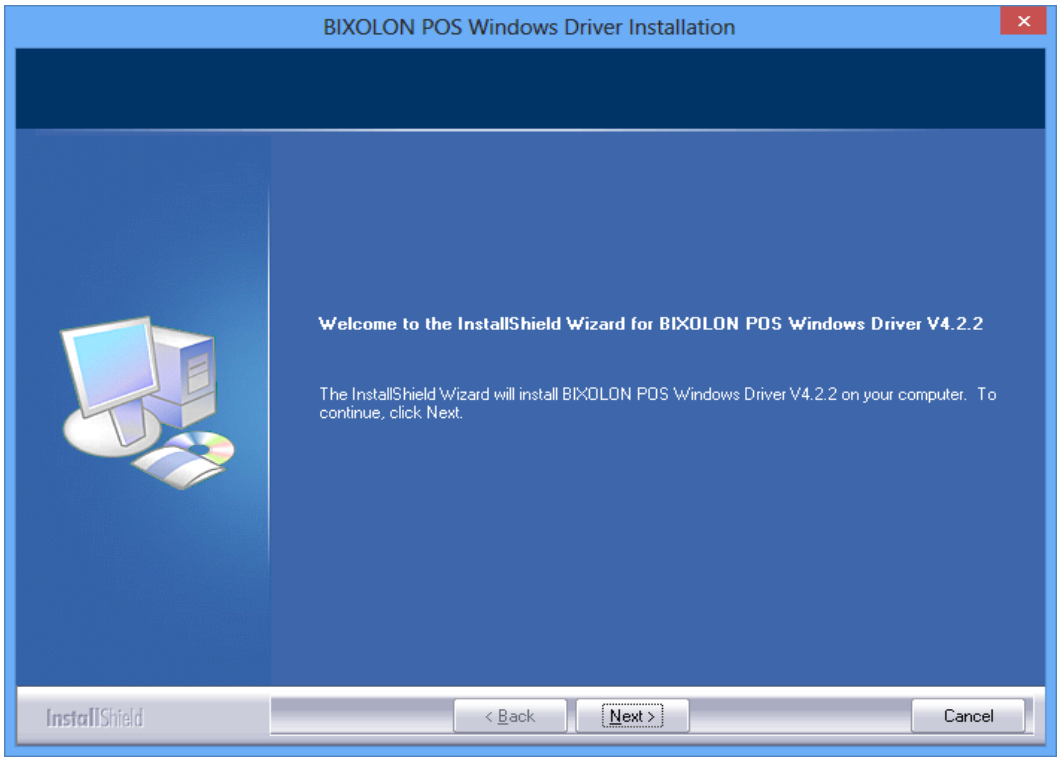


9) Proper installation of the driver is indicated if the test page is printed normally.

4-2-2 Via USB Port

1) Double-click the Windows Driver installation file.

2) Click the “Next” button.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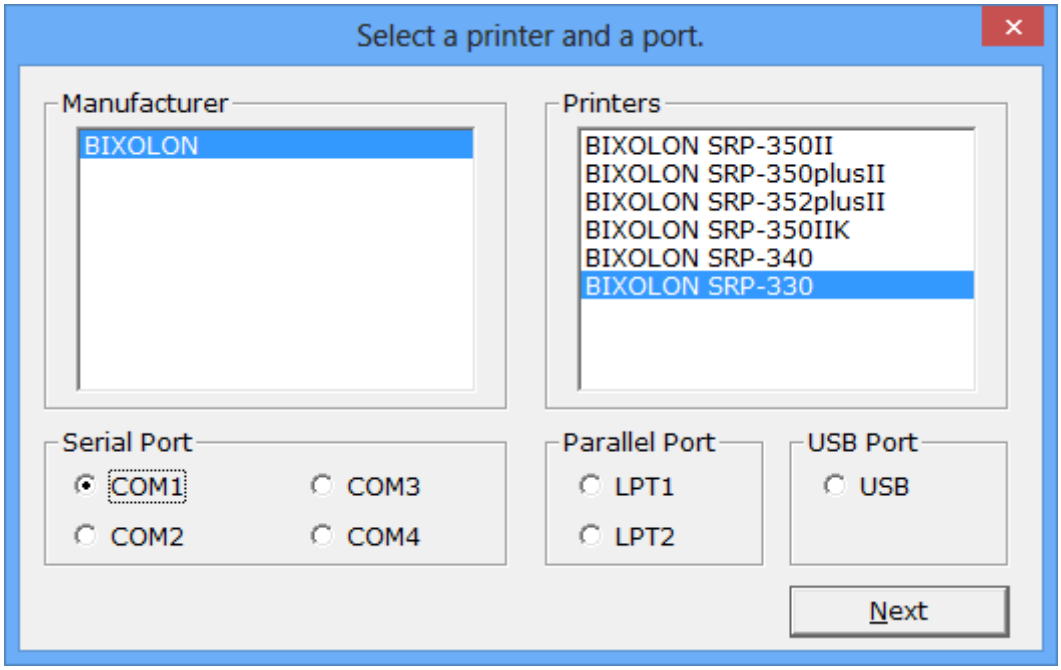
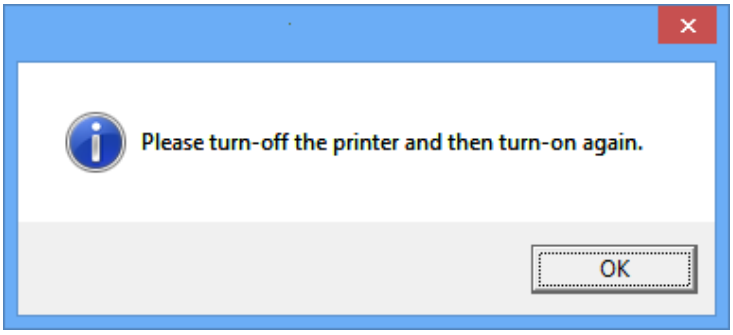
The InstallShield Wizard will install BIXOLON POS Windows Driver V4.2.2 on your computer. To continue, click Next.
InstallShield
< Back
Next >
Cancel

3) Select the printer model and the USB port to be used, and then, click the “Next” button.



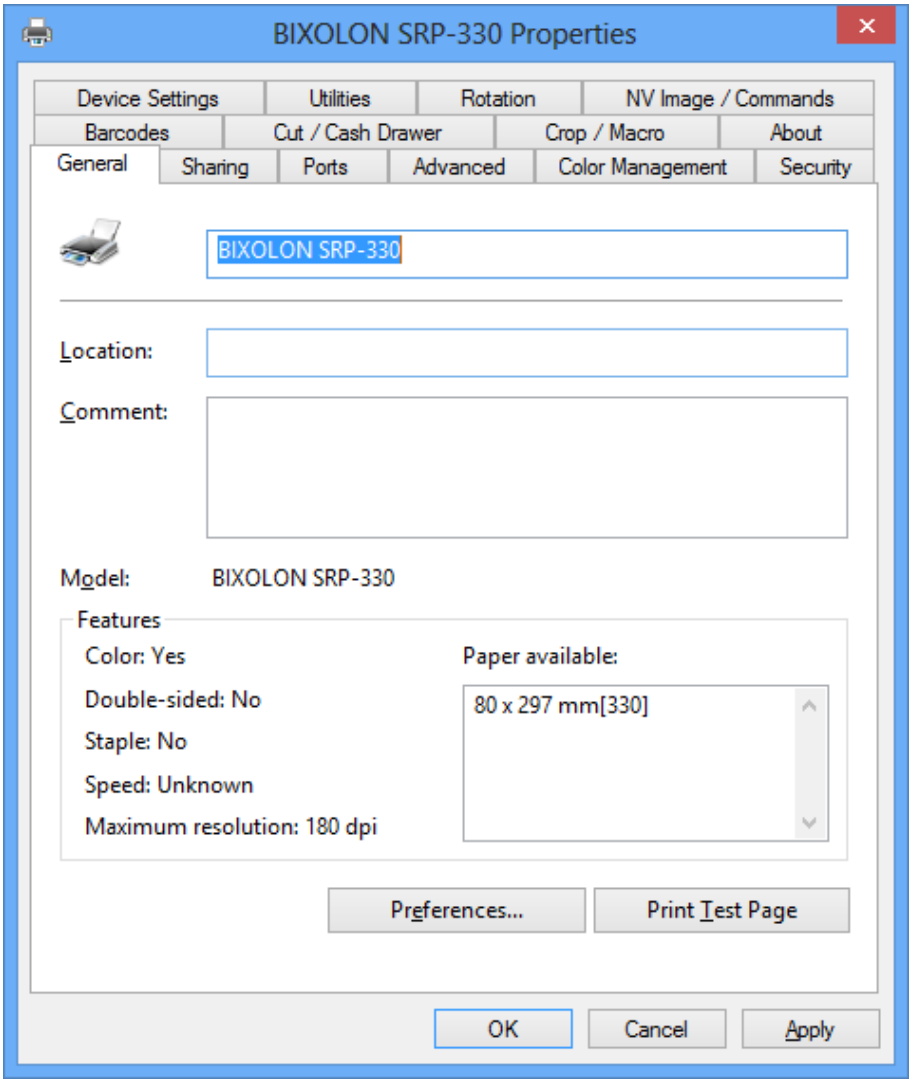
4) Click the “OK” button.



5) Turn off the printer and then turn on again. The printer driver will be installed automatically.

6) Open the printer properties window in the Windows OS.
※ Control Panel – Hardware and Sound – Device and Printers.

7) Click the “Print Test Page” button and check printing status.



8) Proper installation of the driver is indicated if the test page is printed normally.

5. Detailed settings of Windows driver

The following detailed functions can be configured after installing the Windows driver.

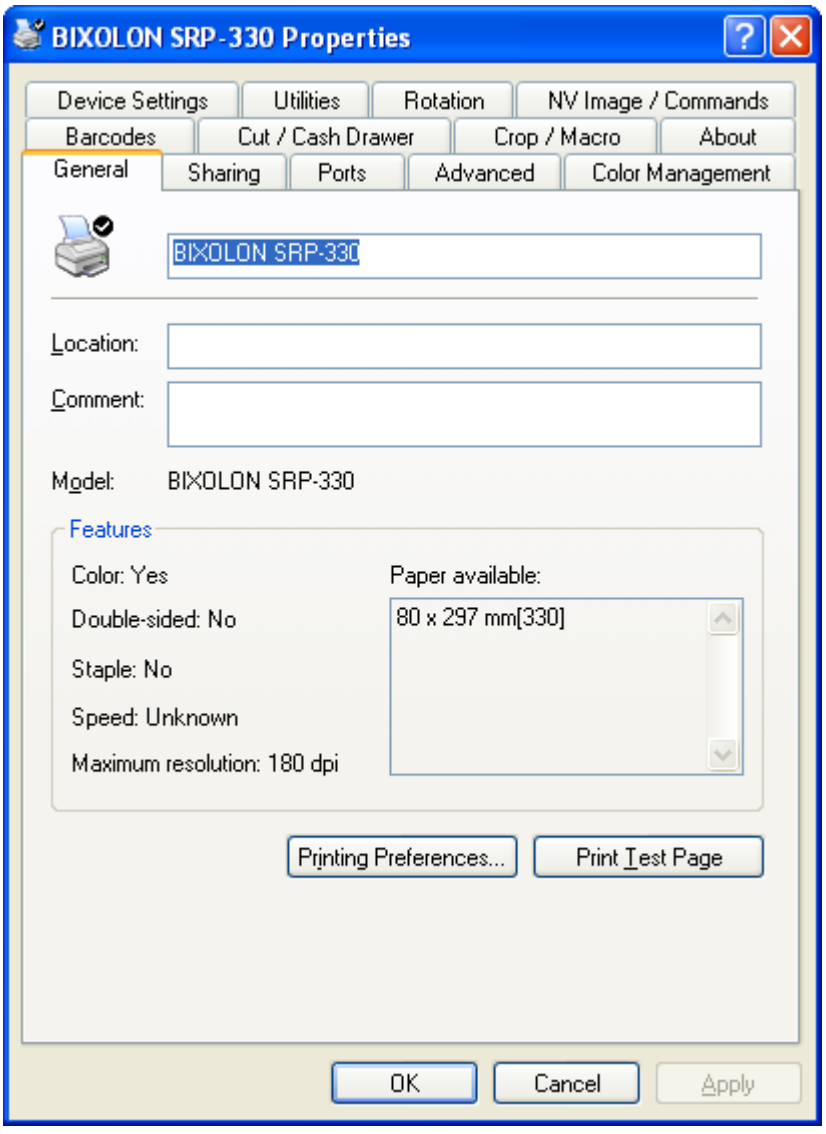
5-1 Paper Supply Method

The printer supports two paper sources.

Automatically Select	:	Select the “Receipt” automatically.
Receipt	:	Each page can be printed with various lengths until the last line.
Ticket	:	Each page can be printed with the same length.

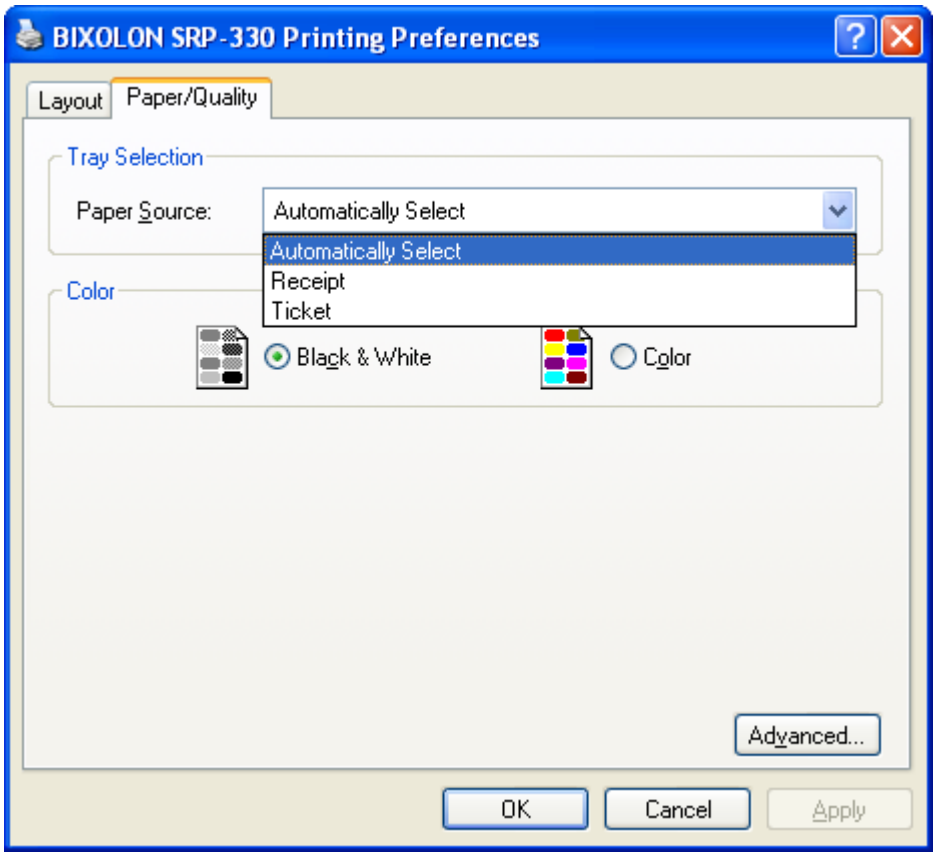
Follow the instructions shown below for setting options.

1) Open the Printer Properties window for the corresponding OS.



2) Click the “Preferences” or “Printing Preferences” button in the “General” tab.
The button name varies by Windows OS.

3) Select the desired setting in the “Paper/Quality” tab.



5-2 Paper size

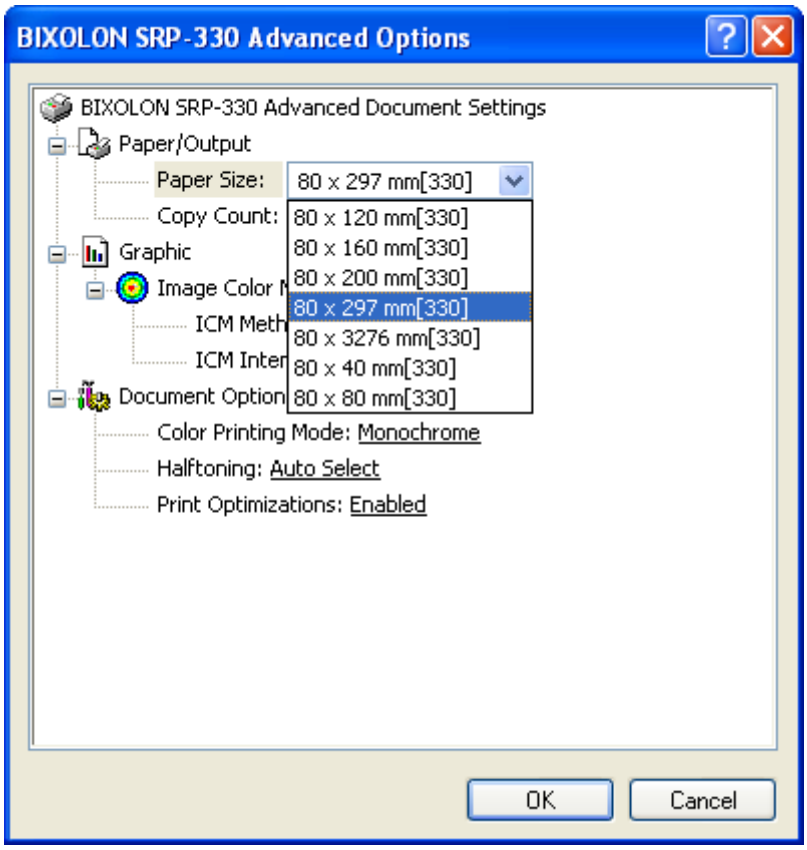
The paper sizes available in the Windows Driver are as follows.

80 × 40 mm[330]
80 × 80 mm[330]
80 × 120 mm[330]
80 × 160 mm[330]
80 × 200 mm[330]
80 × 297 mm[330]
80 × 3276 mm[330]

Follow the instructions shown below to set the options.

1) Select the “General” tab and click the “Printing Preferences” button.

2) Select the “Paper/Quality” tab and click the “Advanced” button.
Select the function to configure.



3) You can add your own custom paper size by clicking “New Paper Size” in the “Utility” tab of the Properties window.

5-3 NV Image / Commands

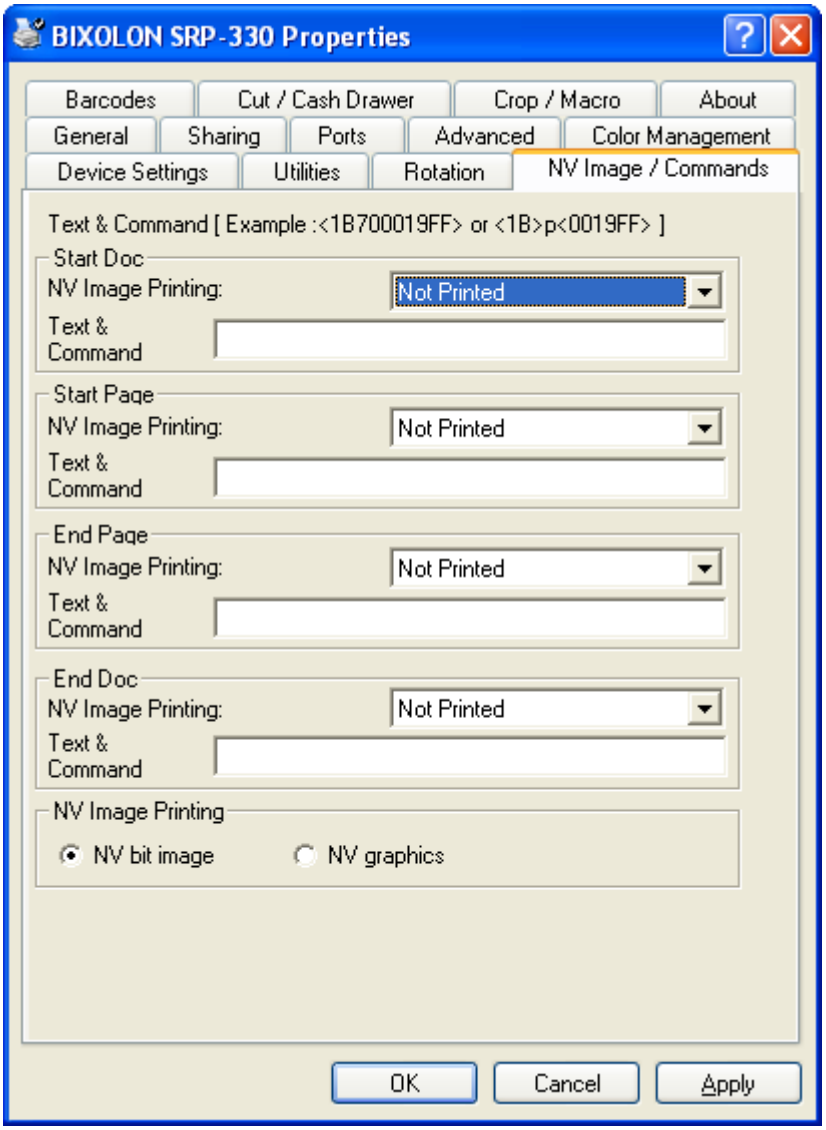
The Windows Driver serves to receive the content for print from an application and send it to the printer. The NV Image and Commands function allows for the addition of desired NV Images and commands at the beginning or end of the print content sent to the printer.

The command functions available are as follows.

Start Doc	:	Addition of NV Images and command at the beginning of the print job.
Start Page	:	Addition of NV Images and command at the beginning of the print page.
End Page	:	Addition of NV Images and command at the end of the print page.
End Doc	:	Addition of NV Images and command at the end of the print job.

1) Open the printer properties window in the Windows OS.

2) Click the “NV Image / Commands” tab.



3) If the user want to open Cash Drawer 1 prior to printing, enter “<1B700019FF>” in the “Start Doc” space and click the “OK” button.

4) If you want to open Cash Drawer 1 after printing, enter “<1B700019FF>” in the “End Doc” field and click the “OK” button.

5) If you want to print the NV image with the document, select the NV image number in the memory and click the “OK” button.

※ Image print command changes when the image is downloaded into the printer using the NV Image Tool in Unified POS Utility.

- [NV bit image]
  Command: FS p n m (Hex: 1C 70 m n)

- [NV Graphics]
  Command: GS (L pL pH m fn kc1 kc2 x y (Hex: 1D 28 4C pL pH m fn kc1 kc2 x y)

5-4 Crop / Macro

This Windows driver supports “Crop / Macro” function.

Crop function
- Crop function is to crop white space of receipt and it can be set from 0-99 mm.

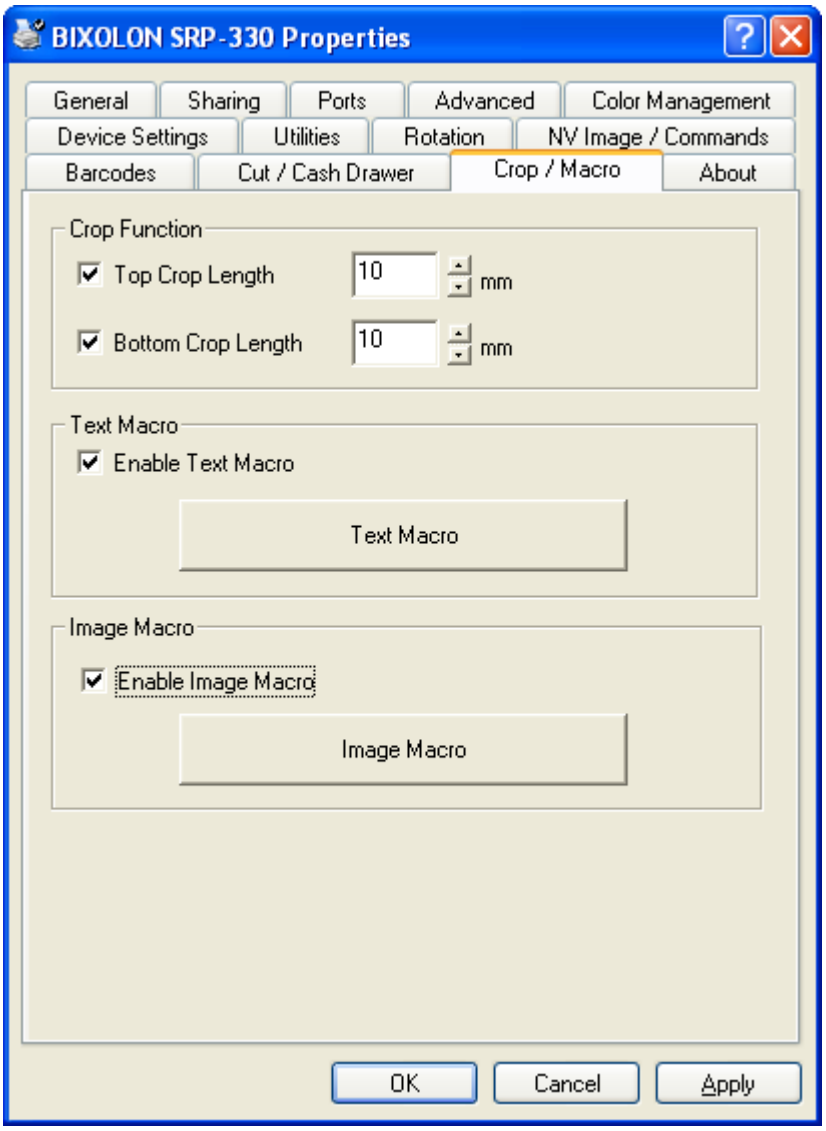
Macro function
- Text Macro function is to replace certain text string with another text string for printing, and it is useful for changing address or telephone number from the application software. And Image Macro function replaces certain text string with an image.

Follow the instructions shown below to set the options.

Crop

1) Open the Printer Properties window for the corresponding OS.

2) Select the “Crop / Macro” tab.



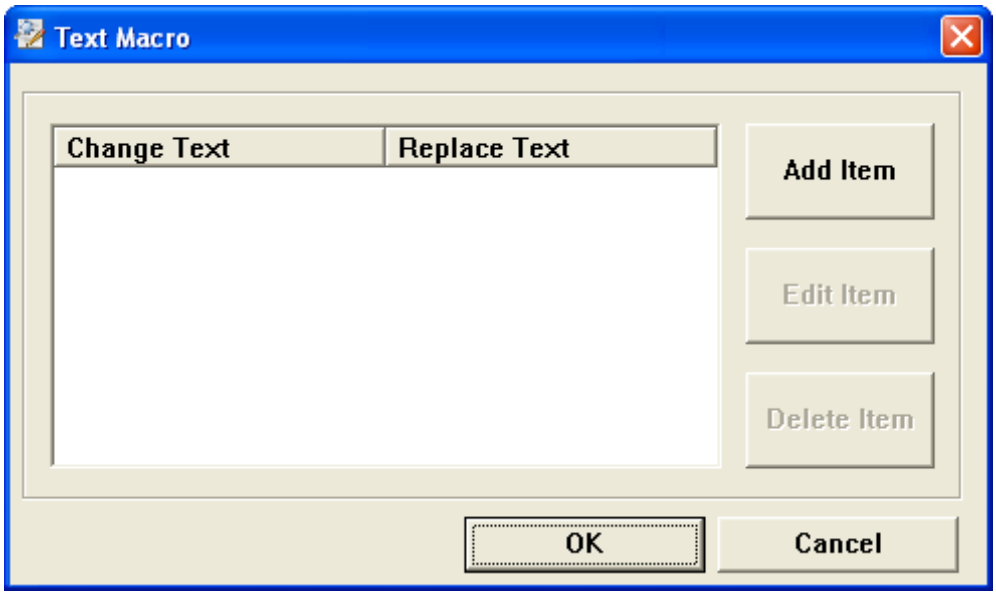
3) If you want to cut the space at the top of the receipt, check the “Top Crop Length” Check box and specify the length to cut.

Text Macro

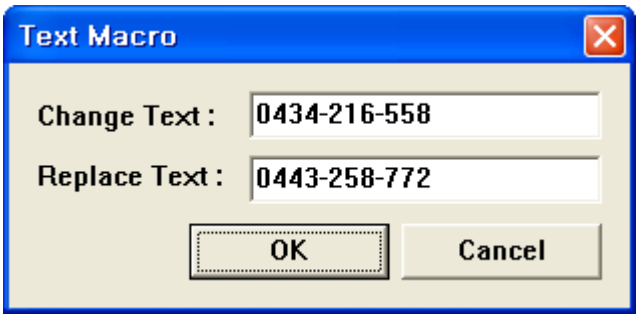
1) Open the Printer Properties window for the corresponding OS.

2) Select the “Crop / Macro” tab.

3) Check the “Enable Text Macro” checkbox and click the “Text Macro” button.



4) When the “Text Macro” window pops up, click the “Add Item” button and enter the contents in the “Change Text” and “Replace Text” fields.



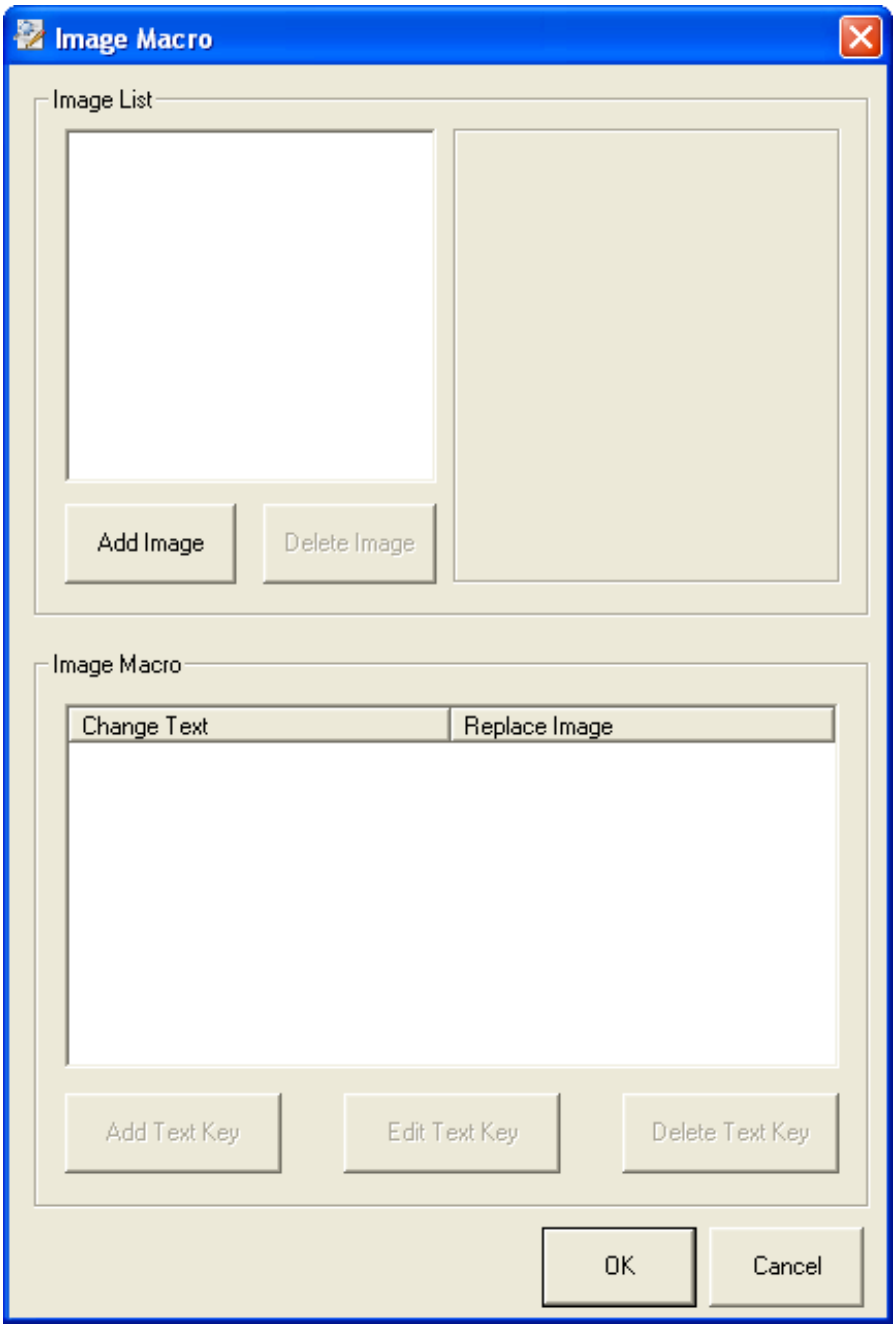
5) Click the “OK” button.

Image Macro

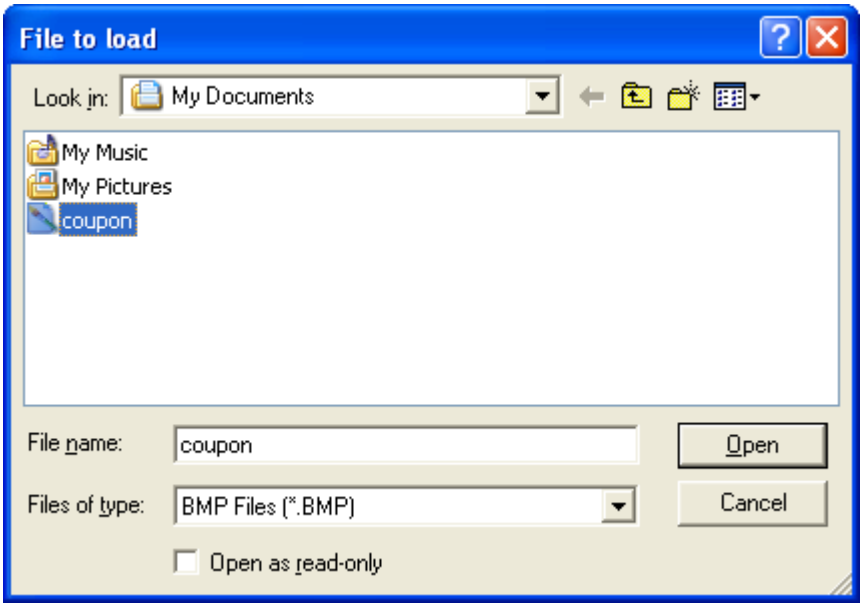
1) Open the Printer Properties window for the corresponding OS.

2) Select the “Crop / Macro” tab.

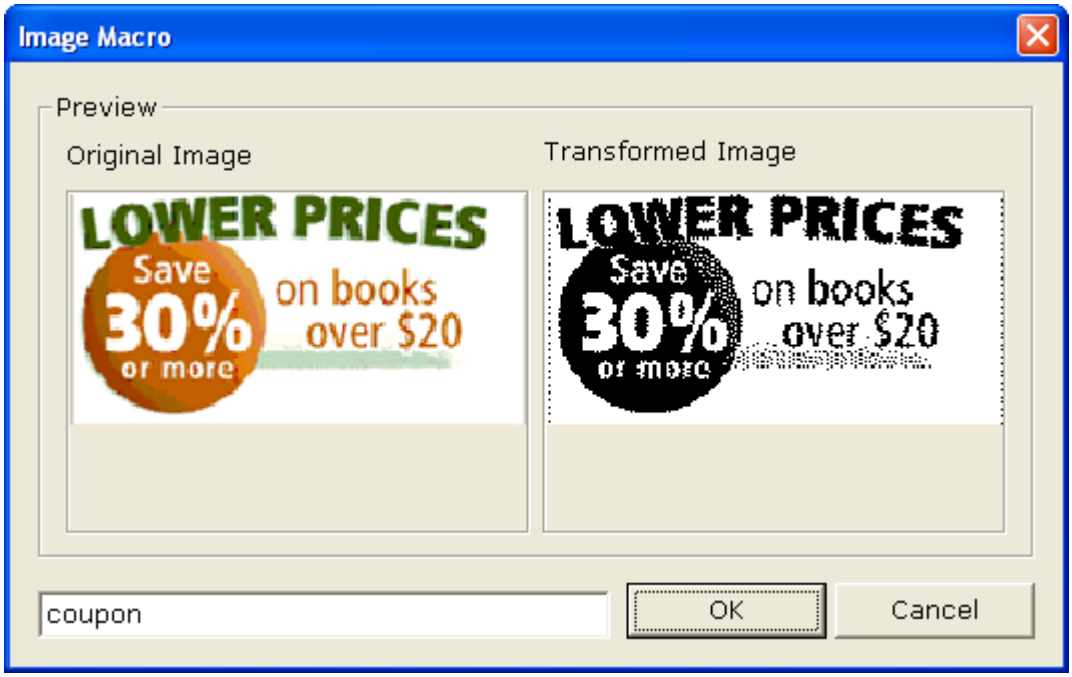
3) Check the “Enable Image Macro” checkbox and click the “Image Macro” button.



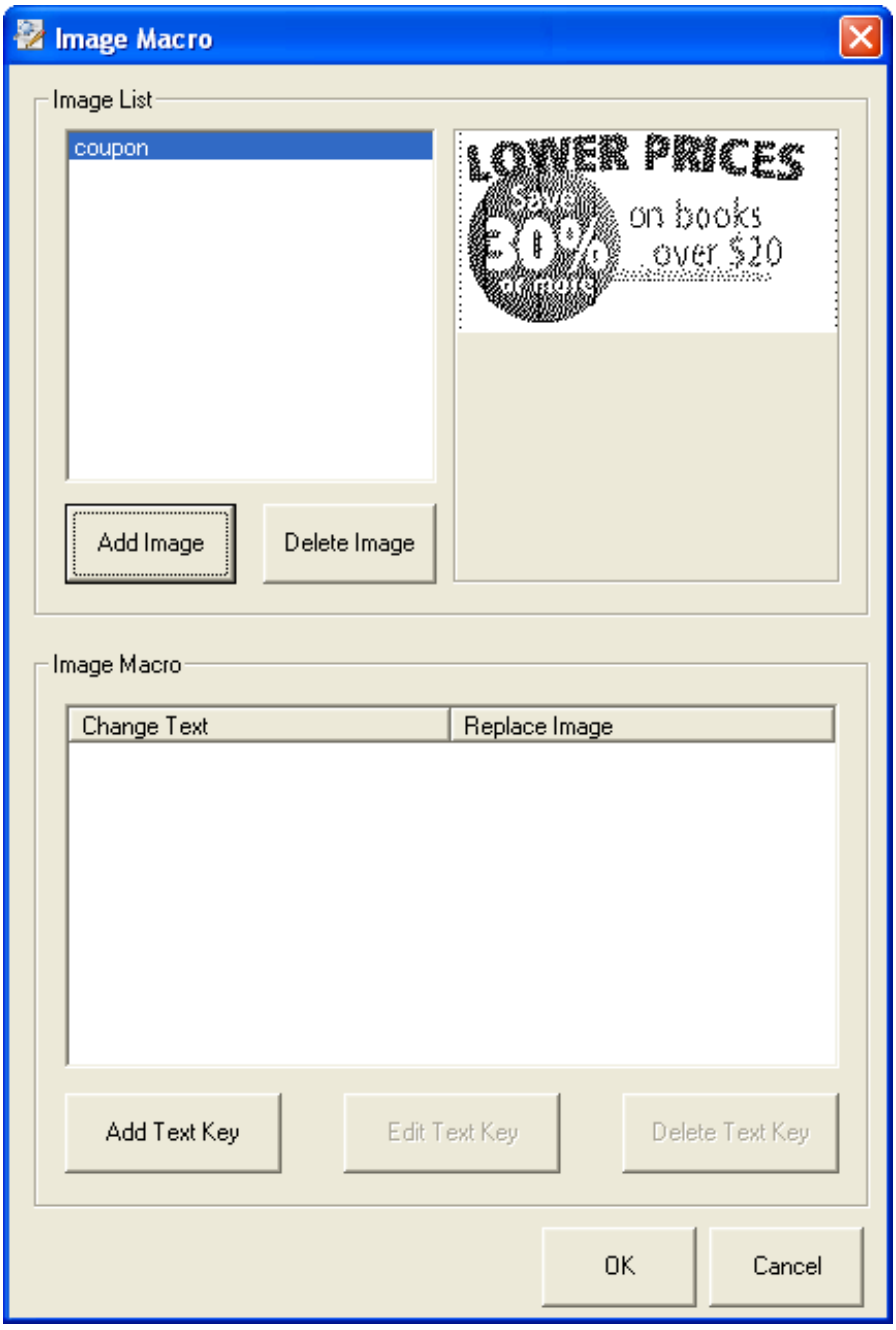
4) Click the “Add Image” button to add it to the image list.



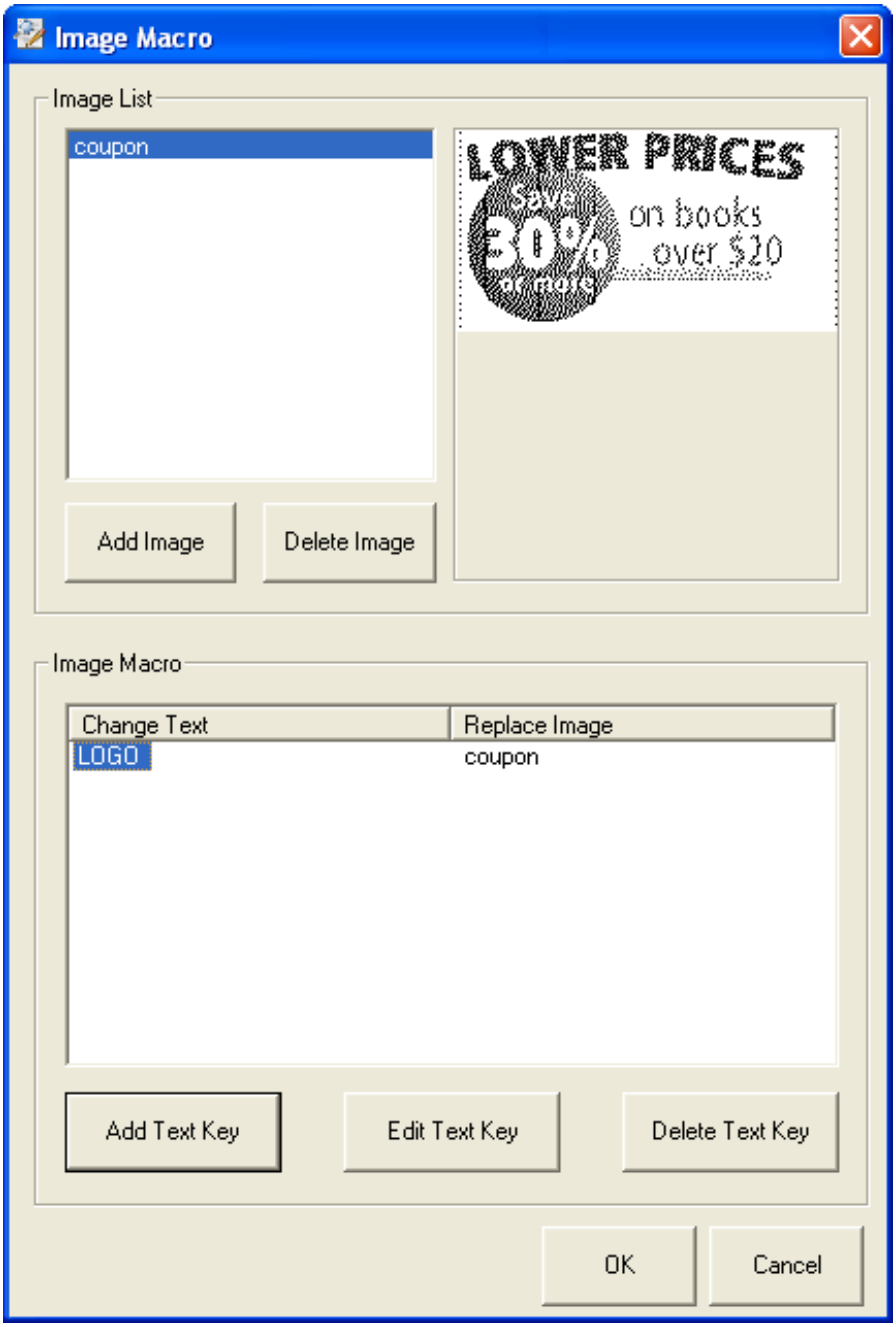
5) Assign an appropriate name for the image file to be added to the list.



6) Click the “Add Text Key” key to set the text key and the image to replace the corresponding text key.



7) Click the “OK” button.



5-5 Barcodes

The Windows Driver supports the barcodes indicated below.
This function is available when entering barcode data after selecting “Printer Font Name”.

Barcodes

Printer Font Name	Size	Supported Characters
Codabar	20/40/60/80	Numeric: 0~9 Symbols: $, +, -, ., /, : Letters: A~D
Code39	20/40/60/80	Numeric: 0~9 Symbols: $, +, -, ., / Letters: A~Z
JAN13(EAN)	20/40/60/80	Numeric: 0~9
JAN8(EAN)	20/40/60/80	Numeric: 0~9
ITF	20/40/60/80	Numeric: 0~9
UPC-A	20/40/60/80	Numeric: 0~9
UPC-E	20/40/60/80	Numeric: 0~9
Code93	20/40/60/80	ASCII CODE: 0~127
Code128	20/40/60/80	ASCII CODE: 0~127

Two-Dimensional Barcodes

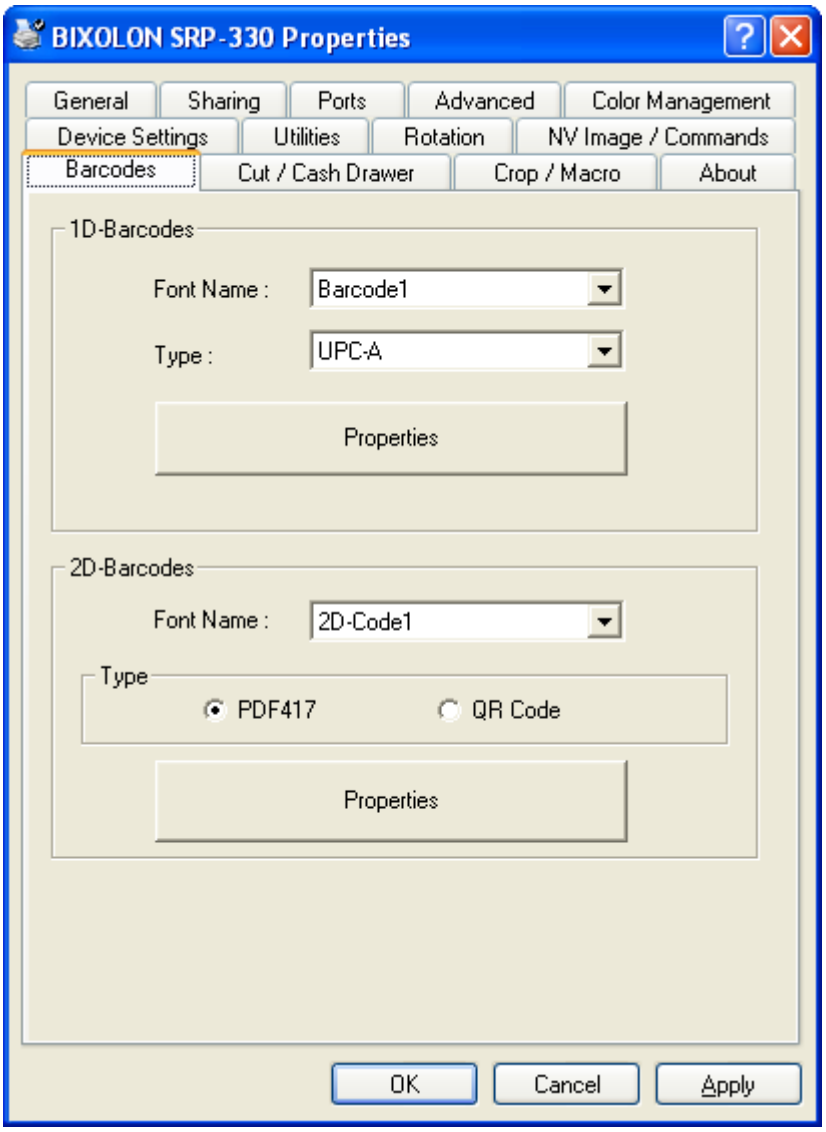
The Windows Driver supports the following two-dimensional barcodes.

- PDF417
- QR Code

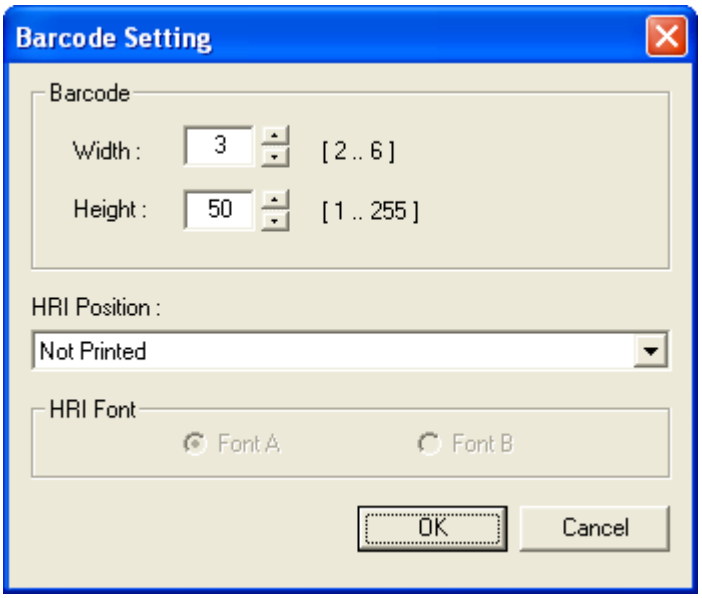
Follow the instructions shown below to use this function.

1) Open the Printer Properties window for the corresponding OS.

2) Select the “Barcodes” tab.

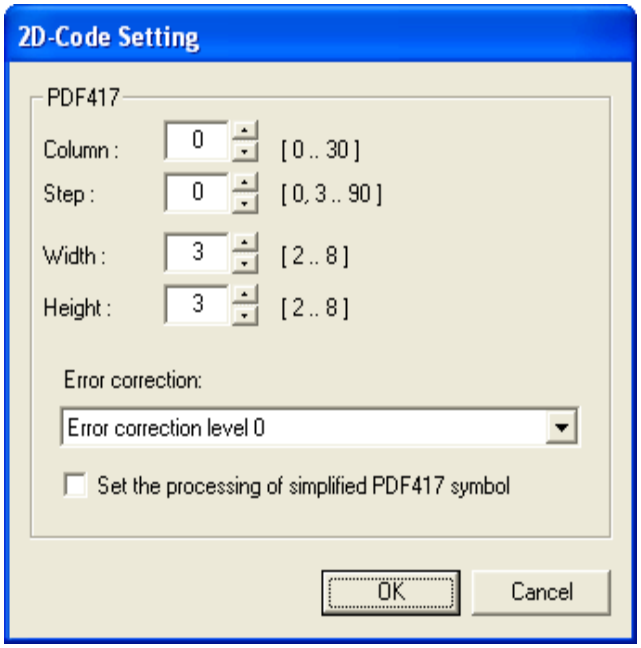


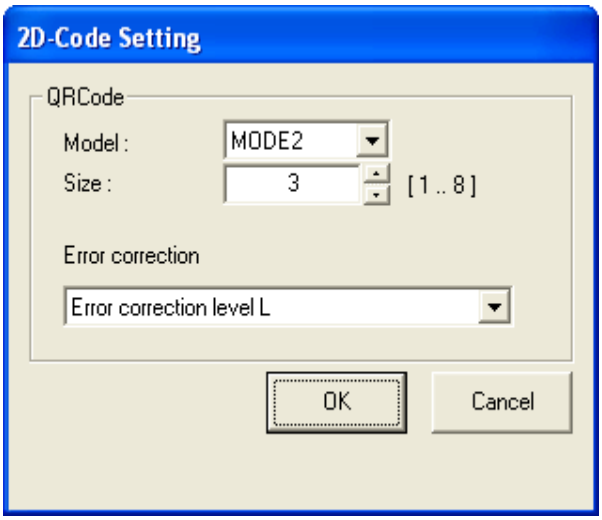
3) If you want to set the barcode, set the “Font Name”, select the Type and click the “Properties” button.



4) Set Barcode’s width, Height and HRI Position and Font type are also available. Click “OK” Button.

5) If the user wants set 2D Barcodes, set “Font Name” and select type of barcodes and click the “Properties” button.





6) Set Barcodes options and click “OK” button.

5-6 Cut / Cash Drawer

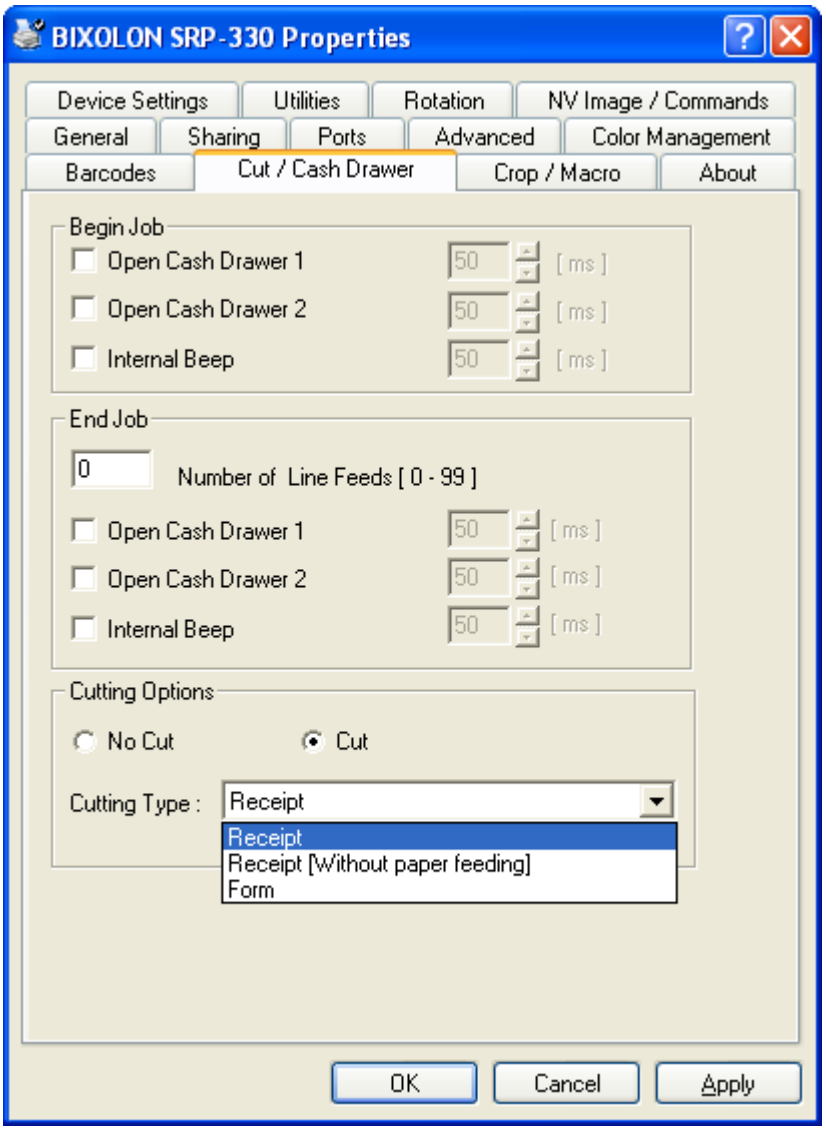
Windows driver supports “Open cash drawer”, “Internal Beep”, and “Cutting Option” functions.

The user can set “Open cash drawer” and “Internal beep” both before printing and after printing and the user also can set “Cutting options” the cutting option can be adjusted as follows.

No Cut: There’s no cutting after the end of printing.

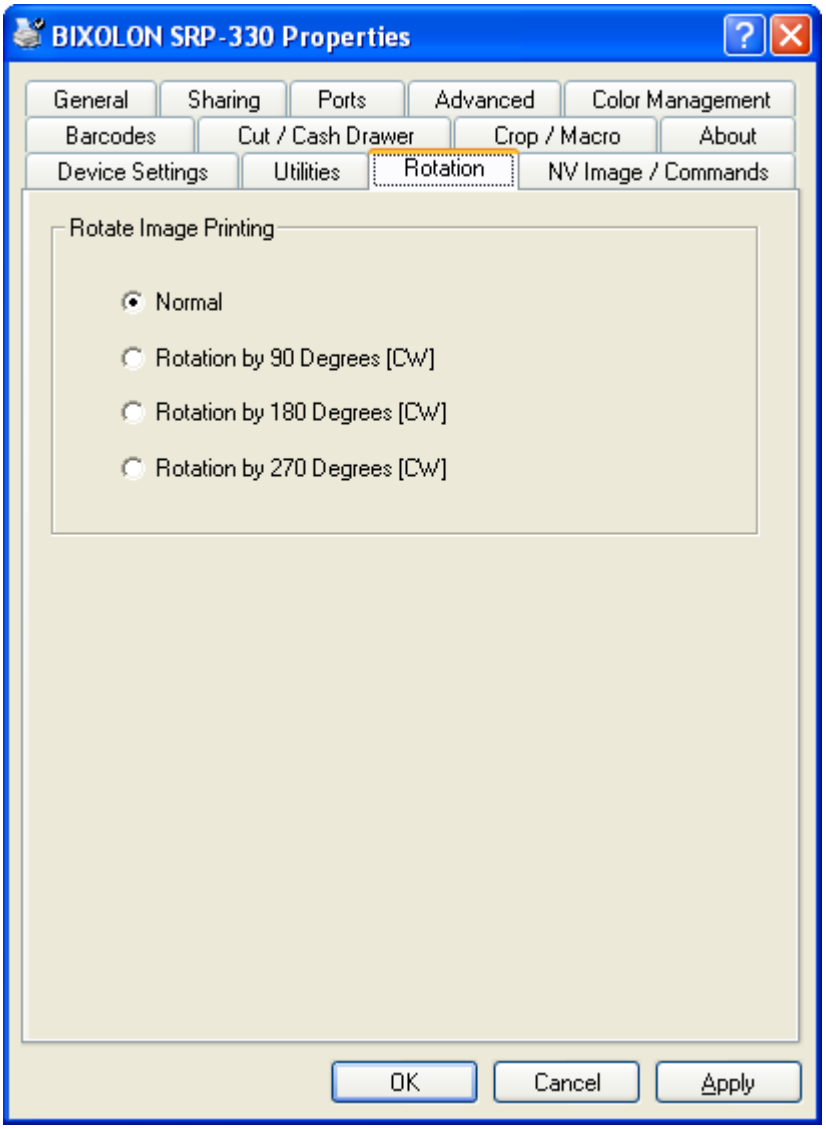
Partial Cut:

Receipt	:	A paper is cut by auto cutter.
Receipt [No Feeds]	:	A paper is cut by auto cutter without paper feeding.
Form	:	For long print jobs, printed text is transferred and cut according to the Receipt option per selected paper size.



5-7 Image Rotation

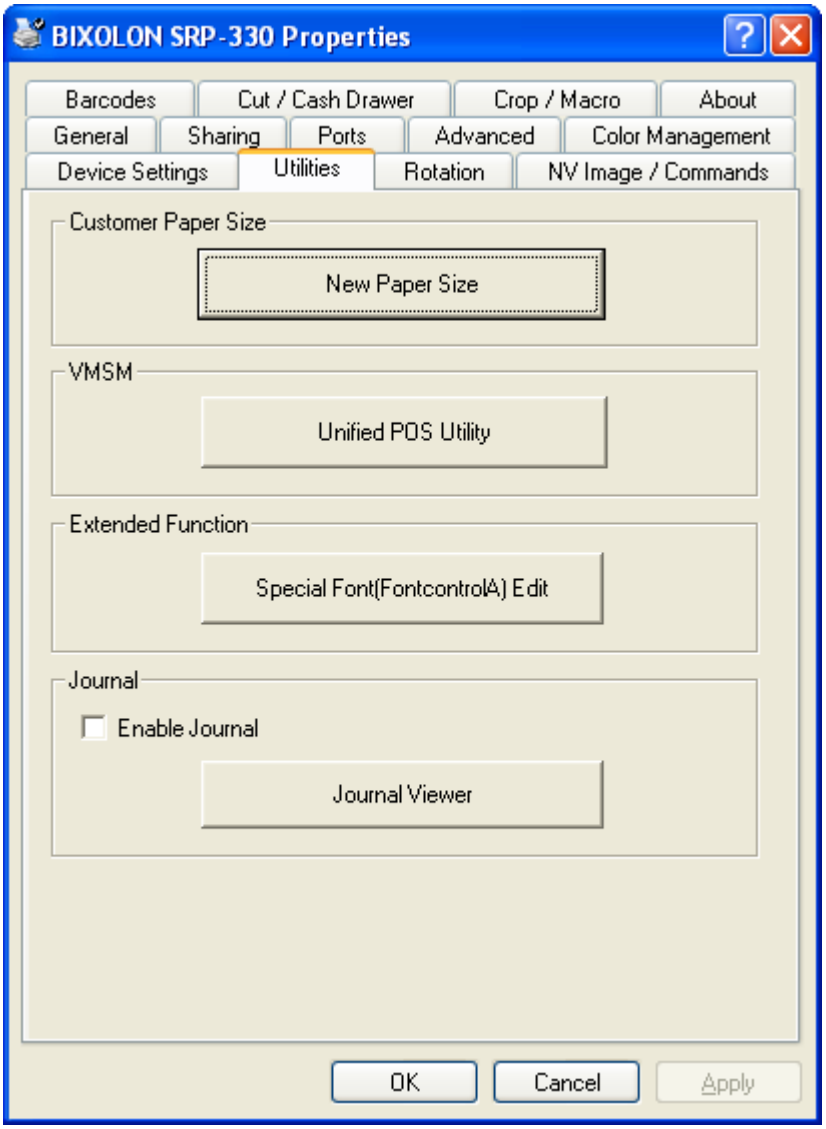
This Windows driver supports “Rotation printing” function for image data only. Rotating device font or barcode font is not supported. “Rotation printing” function is not supported in color printing mode. The printer mode will be changed to mono printing mode automatically if this function is used in the color printing mode.



5-8 Utilities

This Windows driver provides the following utilities.

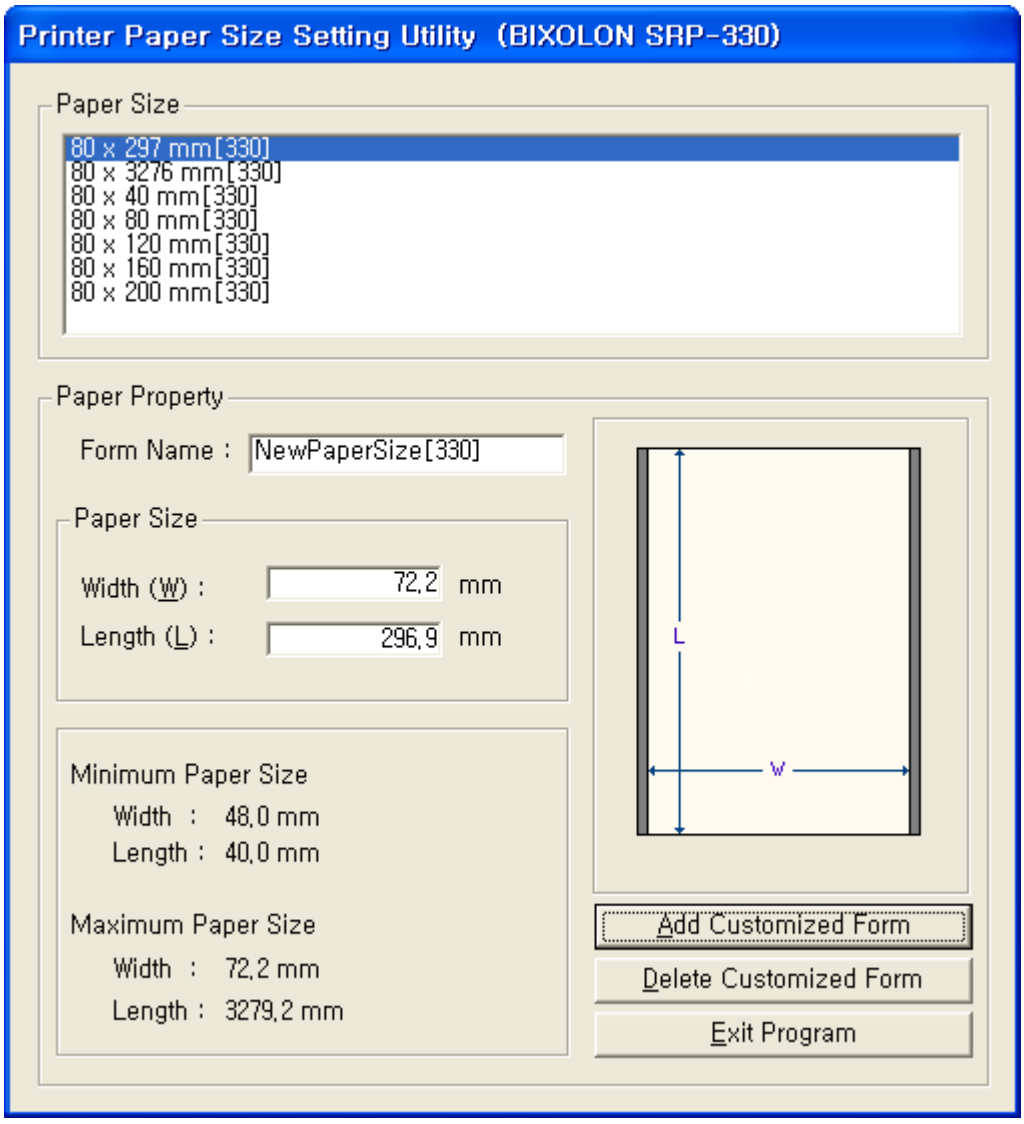
New Paper Size	:	You can add you own paper size using this utility.
Unified POS Utility	:	This utility includes VMSM, NV Image Tool, Water Mark Tool, Font Artist and Command Test Editor.
Special Font Edit	:	The User can set your own special fonts using this utility.
Journal Viewer	:	Journal view utility.



5-8-1 New Paper Size

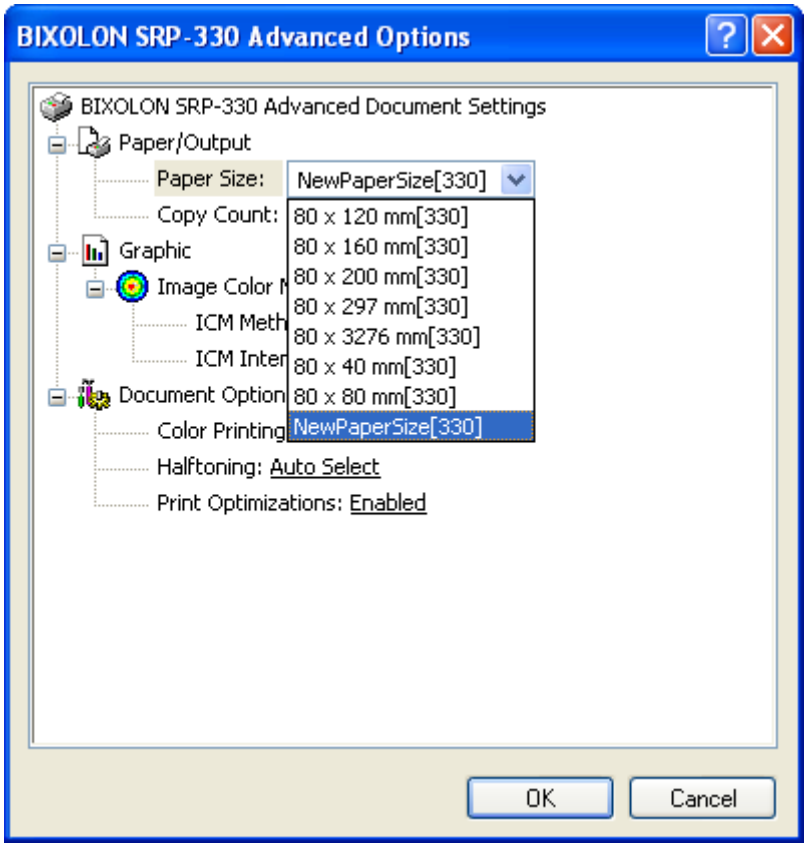
1) Select the “Utilities” tab and click the “New Paper Size” button.

2) Enter the values in the Form Name, Width, and Length fields.



3) Click the “Add Customized Form” button.

4) Select the newly added paper size from the “Advanced Option” window.



5-8-2 Unified POS Utility

Refer to the Unified POS Utility manual contained in the CD for details.

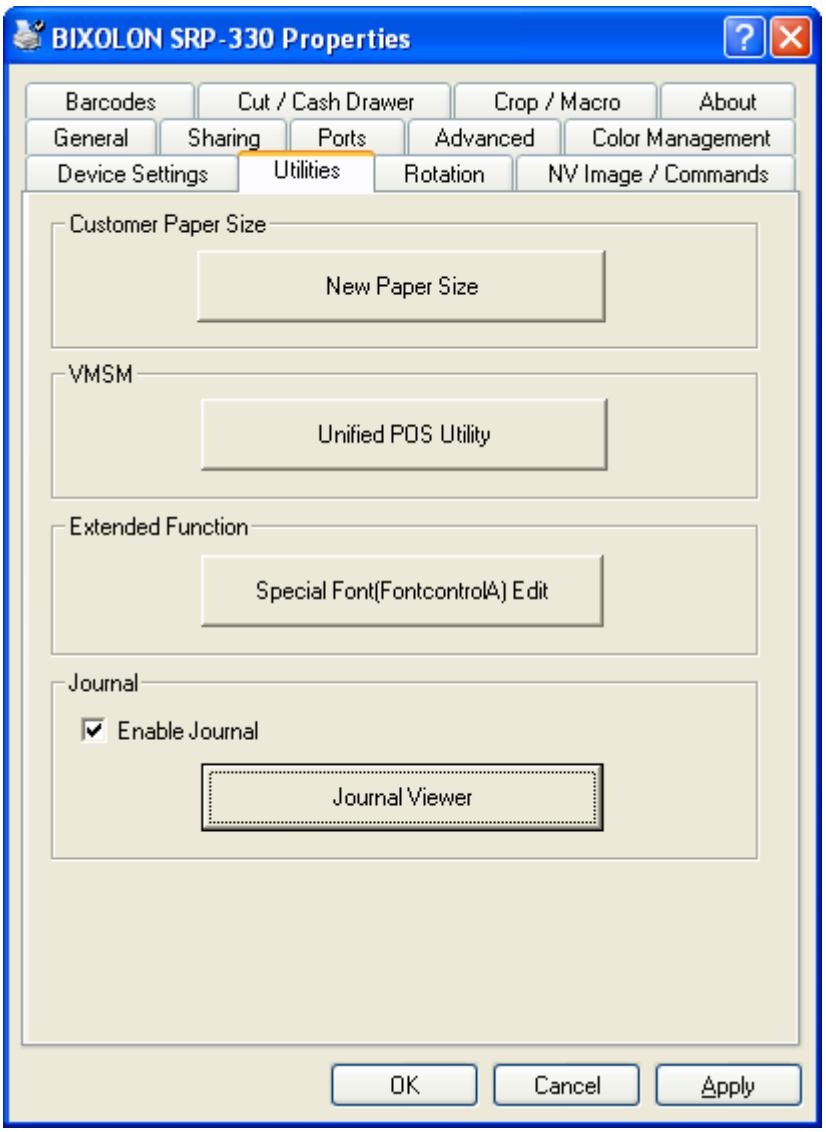
5-8-3 Extended Special Functions

Refer to the section “6-2-1”.

5-8-4 Journal Viewer

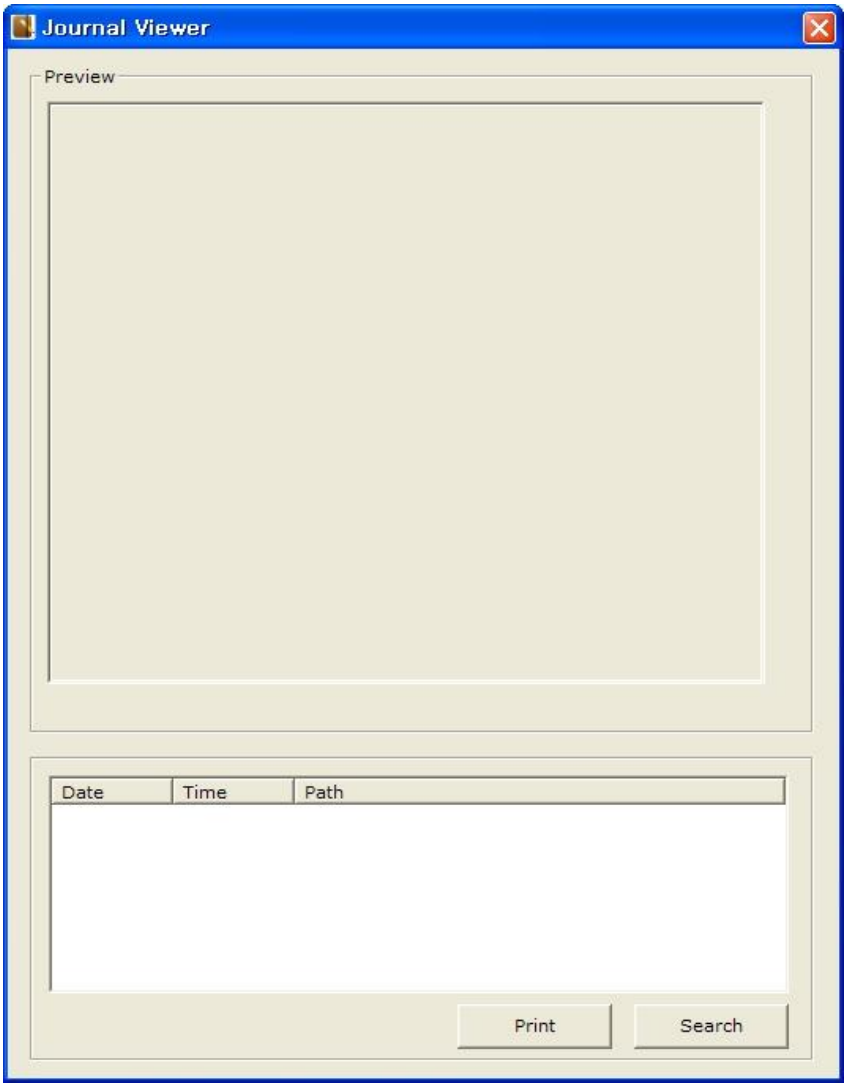
Journal is a function to save a copy of the printed receipt, and you can store the copies without journal printer using this function. Journal function saves a file for each printed document, and the saved files can be searched by printed date or by period with the Journal Viewer utility. This function is supported only when the receipt is printed with image data, and it does not support the receipts printed with device font or barcode.
Journal function is not supported in color printing mode. Journal data will not be saved when you try to use this function in color printing mode.

1) Check the “Enable Journal” to use the Journal function.



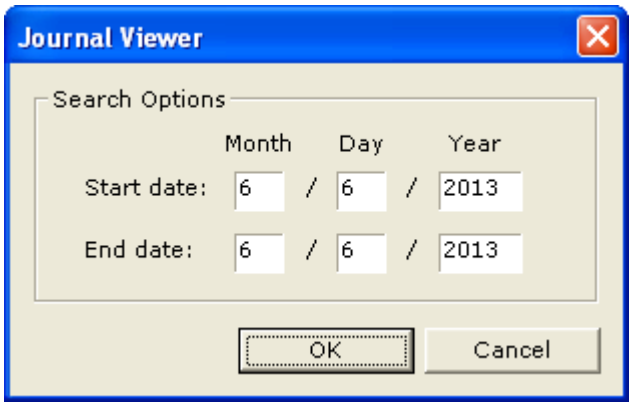
2) Click the “Journal Viewer” in the “Utilities” tab.

3) The following window will be launched.



4) Select the file from the list on the bottom and click the “Print” button to print the file.

5) Click the “Search” button and set the search conditions to search the journals by date or period.



6. Windows Driver Specifications

6-1 Font

This Windows driver supports various fonts in the following table. Printing using these fonts is faster than using Windows fonts provided by the operating system.

Printer font			Character Size (dot)	Sizes (point)
FontA1x1	FontA1x1[Ext.]	FontA1x1[255]	FontA1x1(12x24)	9.5
FontA1x2	FontA1x2[Ext.]	FontA1x2[255]	FontA1x2(12x48)	19
FontA2x1	FontA2x1[Ext.]	FontA2x1[255]	FontA2x1(24x24)	9.5
FontA2x2	FontA2x2[Ext.]	FontA2x2[255]	FontA2x2(24x48)	19
FontA2x4	FontA2x4[Ext.]	FontA2x4[255]	FontA2x4(24x96)	38.5
FontA4x2	FontA4x2[Ext.]	FontA4x2[255]	FontA4x2(48x48)	19
FontA4x4	FontA4x4[Ext.]	FontA4x4[255]	FontA4x4(48x96)	38.5
FontA4x8	FontA4x8[Ext.]	FontA4x8[255]	FontA4x8(48x192)	77
FontA8x4	FontA8x4[Ext.]	FontA8x4[255]	FontA8x4(96x96)	38.5
FontA8x8	FontA8x8[Ext.]	FontA8x8[255]	FontA8x8(96x192)	77
FontB1x1	FontB1x1[Ext.]	FontB1x1[255]	FontB1x1(9x17)	7
FontB1x2	FontB1x2[Ext.]	FontB1x2[255]	FontB1x2(9x34)	13.5
FontB2x1	FontB2x1[Ext.]	FontB2x1[255]	FontB2x1(18x17)	7
FontB2x2	FontB2x2[Ext.]	FontB2x2[255]	FontB2x2(18x34)	13.5
FontB2x4	FontB2x4[Ext.]	FontB2x4[255]	FontB2x4(18x68)	27
FontB4x2	FontB4x2[Ext.]	FontB4x2[255]	FontB4x2(36x34)	13.5
FontB4x4	FontB4x4[Ext.]	FontB4x4[255]	FontB4x4(36x68)	27
FontB4x8	FontB4x8[Ext.]	FontB4x8[255]	FontB4x8(36x136)	54.5
FontB8x4	FontB8x4[Ext.]	FontB8x4[255]	FontB8x4(72x68)	27
FontB8x8	FontB8x8[Ext.]	FontB8x8[255]	FontB8x8(72x136)	54.5
FontC1x1	FontC1x1[Ext.]	FontC1x1[255]	FontC1x1(9x24)	9.5
FontC1x2	FontC1x2[Ext.]	FontC1x2[255]	FontC1x2(9x48)	19
FontC2x1	FontC2x1[Ext.]	FontC2x1[255]	FontC2x1(18x24)	9.5
FontC2x2	FontC2x2[Ext.]	FontC2x2[255]	FontC2x2(18x48)	19
FontC2x4	FontC2x4[Ext.]	FontC2x4[255]	FontC2x4(18x96)	38.5
FontC4x2	FontC4x2[Ext.]	FontC4x2[255]	FontC4x2(36x48)	19
FontC4x4	FontC4x4[Ext.]	FontC4x4[255]	FontC4x4(36x96)	38.5
FontC4x8	FontC4x8[Ext.]	FontC4x8[255]	FontC4x8(36x192)	77
FontC8x4	FontC8x4[Ext.]	FontC8x4[255]	FontC8x4(72x96)	38.5
FontC8x8	FontC8x8[Ext.]	FontC8x8[255]	FontC8x8(72x192)	77

Printer Fonts are defined as follows.

1) FontA1x2
   - ANSI Character code support (Code page 16: 1252)
   - Font size (dot): 12 x 48 (Double height)
   - Point size: 19

2) FontA1x2 [Ext]
   - IBM expansion Character code support (Code page 0: 437)
   - Font size (dot): 12 x 48 (Double height)
   - Point size: 19

3) FontA1x2 [255]
   - BUYER ONLY code support (Code page 255)
   - Font size (dot): 12 x 48 (Double height)
   - Point size: 19

6-2 Special Functions

This Windows driver supports the special functions as shown in the following table. Select the “FontControl” character first and use the characters in the table to use the special functions. Take care as this function is not for printing general texts.

Font (Character)	Special Functions
5	Print HT (0 x 09)
6	Print LF (0 x 0A)
7	Print CR (0 x 0D)
a	Open Drawer 2 (50ms driver pulse width)
b	Open Drawer 2 (100ms driver pulse width)
c	Open Drawer 2 (150ms driver pulse width)
d	Open Drawer 2 (200ms driver pulse width)
e	Open Drawer 2 (250ms driver pulse width)
f	Open Drawer 2 without paper feeding (50ms driver pulse width)
g	Cut Receipt (partial cut) without paper feeding
i	Prints double-sized color image saved in the 00 address
j	Prints double-sized color image saved in the 01 address
k	Prints double-sized color image saved in the 02 address
l	Prints double-sized color image saved in the 03 address
m	Prints double-sized color image saved in the 04 address
p	Does not add HRI characters to the barcode
q	Adds HRI characters in FontA above the barcode
r	Adds HRI characters in FontA below the barcode
s	Adds HRI characters in FontB above the barcode
t	Adds HRI characters in FontB below the barcode
w	Aligns text to the left
x	Aligns text to the center
y	Aligns text to the right
A	Open Drawer 1 (50ms driver pulse width)
B	Open Drawer 1 (100ms driver pulse width)
C	Open Drawer 1 (150ms driver pulse width)
D	Open Drawer 1 (200ms driver pulse width)
E	Open Drawer 1 (250ms driver pulse width)
F	Open Drawer 1 without paper feeding (50ms driver pulse width)
G	Print NV bitmap image 1
H	Print NV bitmap image 2
I	Print NV bitmap image 3
J	Print NV bitmap image 4
K	Print NV bitmap image 5
P	Cut Receipt (partial cut)
R	Print the NV Graphics stored in the address 00
S	Print the NV Graphics stored in the address 01
T	Print the NV Graphics stored in the address 02
U	Print the NV Graphics stored in the address 03
V	Print the NV Graphics stored in the address 04
[	Print double size NV bitmap image 1
]	Print double size NV bitmap image 2
^	Print double size NV bitmap image 3
_	Print double size NV bitmap image 4
`	Print double size NV bitmap image 5

1) Example

Select “FontControl” character and send 6 for “LF” (Line Feed) operation (instead of printing character “6”).

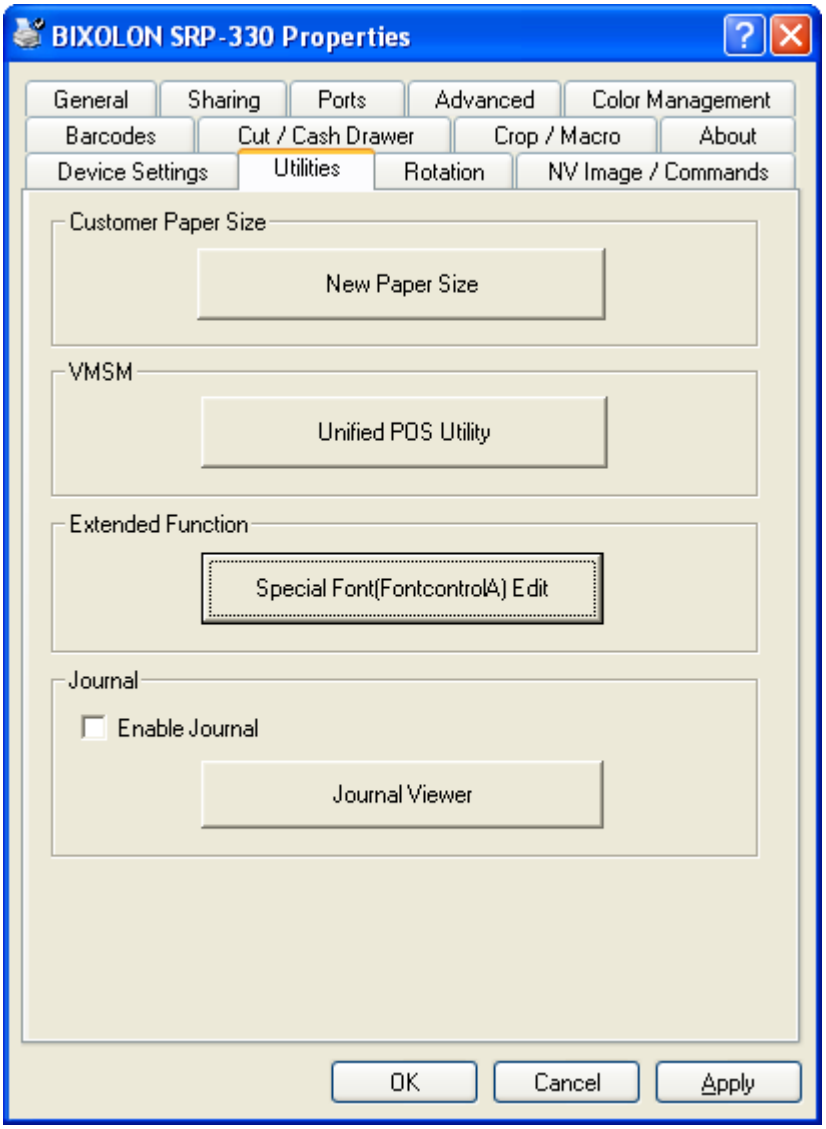
2) “FontControl” character function

Printer font special function	Function	Size(point/dot)
FontControl	Open Drawer 1/2 Cut receipt Cut receipt(without paper feeding) Justification (Left/Center/Right) Output HT, Output LF, Output CR Barcode Printing Print NV Graphic Data	(9.5 / 12x24)

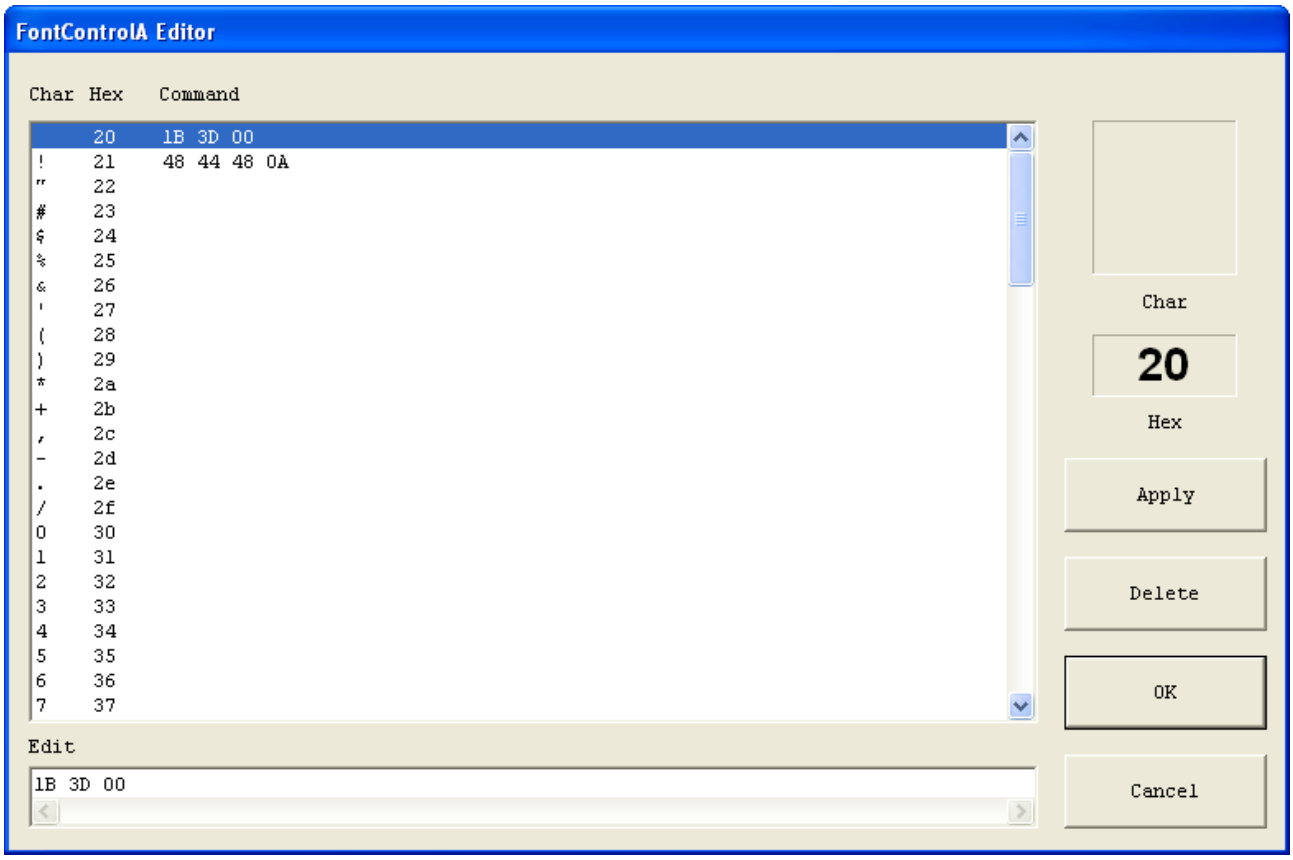
6-2-1 “Special Font Edit” Utility

“FontControlA” character function can be extended using the “Special Font Edit” Utility.
You can define new commands in the SRP330.ini file using this utility, and the “FontControlA” character can be changed to arbitrary user setting character.
(The range of the character code is 0x20 ~ 0x7F.)

1) You can edit INI file through special utility, FontControlA Editor in Utilities tab.



2) After editing data in edit control, you have to click “Apply button” to apply data.
As clinking “OK” button, the utility set up the data in INI file.



7. Use of Windows Driver

7-1 Use of Visual Basic

This section contains example codes to control the printer (BIXOLON SRP-330) using Windows driver with Visual Basic.

7-1-1 Windows Driver Selection

The following example code explains how to select the “BIXOLON SRP-330” Windows driver.

```
For Each prnPrinter In Printers
If prnPrinter.DeviceName = “BIXOLON SRP-330” Then
Set Printer = prnPrinter
Exit For
End If
Next
```

7-1-2 Test Printing

The following example code explains how to print the text using Windows font (Arial Test) and Printer font (FontA1x1).

```
‘Print in Windows font
Printer.FontSize = 9
Printer.FontName = “Arial”
Printer.Print “Arial Test”


‘Print in printer font
Printer.FontSize = 9.5
Printer.FontName = “FontA1x1”
Printer.Print “FontA1x1 Font”

Printer.EndDoc
```

7-1-3 Barcode Printing

The following example code explains how to print the barcode (JAN8 (EAN)).

```
'Print Bar Code.
Printer.FontSize = 20

Printer.FontName = "JAN8 (EAN)"
Printer.Print "1234567"

Printer.EndDoc
```

7-1-4 Two-Dimensional Barcode Printing

The following example code explains how to print the 2-D barcode (PDF417).

```
'Print Two-dimensional Codes.
Printer.FontSize = 9.5

Printer.FontName = "PDF417"
Printer.Print "Print Test PDF417"

Printer.EndDoc
```

7-2 Use of WordPad

7-2-1 WordPad Environment Settings

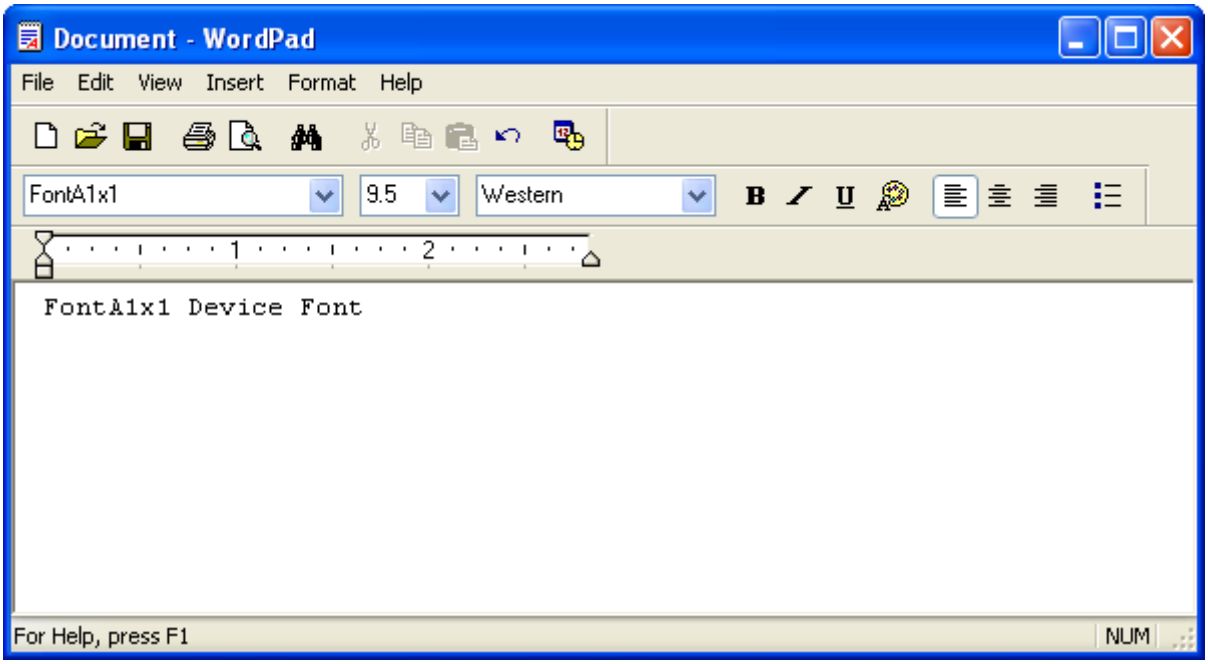
Launch WordPad, set the printing related options as follows, and test the printer with WordPad.

- Select printer
  Select “Print” from the “File” menu, and select the printer (BIXOLON SRP-330).

- Set paper size, orientation, margin, etc.
  Select the “Page Setting” from “File” menu, and set paper size, orientation, and margin.

7-2-2 Text Printing

Print the text from WordPad using the Windows driver of the printer.



1) Select the font from the font selection box (FontA1x1).

2) Select the point size from the point selection box (9.5).

3) Enter the text to print.

4) Click the Print icon in the toolbar to print the text.